### BOROUGH OF DARWEN.



# REPORT

OF

# F. G. HAWORTH,

M.B.C.M., L.R.C.S., D.P.H.,

# MEDICAL OFFICER OF HEALTH,

Medical Officer to the Education Committee,

POLICE SURGEON,

FOR THE

Year ending December 31st, 1920.

DARWEN:

J. J. RILEY, Printer, Bookbinder, &c., "News Office.

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"BROOKLYN," DARWEN,
FEBRUARY, 1921.

# TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.

GENTLEMEN,

I have the honour to present to you my Twenty-Sixth Annual Report, being for the year ending December 31st, 1920.

I am, Gentlemen,

Your obedient servant,

#### F. C. HAWORTH,

Medical Officer of Health,

Darwen Urban Sanitary Authority.

# Members of the Health Committee.

1920-1921.

COUNCILLOR T. DUXBURY, J.P., MAYOR.

#### Chairman:

ALDERMAN W. WORTH, J.P.

#### Vice-Chairman:

ALDERMAN G. P. HOLDEN, J.P.

Alderman J. Cocker, J.P.	Councillor	T. W. A. Forrest, M.B.E.						
" F. HINDLE, C.C.		J.P, C.C.						
"H. C. JEPSON.	,,	T. E. HOLGATE, J.P.						
" Ј. Ріскир, Ј.Р.	, ,	G. Hunt.						
Councillor Wm. Ainsworth, J.P.	, ,	W. Knowles.						
" Crossley St. John Broad-	, ,	T. LIGHTBOWN.						
BENT.	,,	R. Marsden.						
" E. L. CARUS, J.P.	"	J. W. MASON,						
" G. Butterworth, J.P.	,,	J. PARKINGTON, J.P.						
"T. Duxbury, J.P.	,,	G. PICKUP, J.P.						
" F. C. Duckworth.	,,	John B. Thornley, J.P.						
" H. B. Eccles, J.P.	,,	L. Tomlinson.						
TOWN CLERK								
SUPERINTENDENT OF SCAVENGING		Joseph Niccoll.						
SLAUGHTER HOUSE AND MEAT INSPECTOR	R							
Shops' Inspector	• • • • • • • • • • • • • • • • • • • •	W. E. MARSDEN.						
MEDICAL OFFICER OF INFECTIOUS DISEAS	ES HOSPITAL	F. G. HAWORTH.						
Matron, Infectious Diseases Hospitai		Miss E. B. Norris.						
School Nurse		Miss E. Mycock.						
LADY HEALTH VISITOR		Mrs. H. H. Shawcross.						
MATRON, DAY NURSERY		Miss E. A. Bruce.						

# REPORT.

Natural and Social Conditions of the District.

# Population.

The population, based on the Registrar General's return, is estimated for the middle of 1920 at 39,182.

The following has been received from the Office of the Registrar-General, Somerset House:

- "The Annual distribution of his Returns of Births and Deaths, and Estimates of Population for the past year affords the Registrar-General an opportunty of directing the attention of Medical Officers of Health and others using the returns, to some points upon which experience has shown that misunderstandings tend to arise.
- 1. The number of births and deaths are those registered during the calendar year and are corrected for inward and outward transfers; they will differ therefore from uncorrected figures compiled locally either for the calendar year or for a period of fifty-two or fifty-three weeks.
- 2. In 1920 demobilisation had reached a stage at which it is felt that the distinction between "birth-rate populations" and "death-rate populations" made during the period when a large part of the male population were under arms, might in general be discontinued. For most districts, therefore, a single estimate of population is shown, and this is applicable to both births and deaths. For a few areas which contain an appreciable non-civilian population, however, two estimates of population, one for calculation of the birth-rate, and one for the civilian death-rate, are given, as in recent years.

The 'Birth-rate (and Marriage-rate) Population,' on the other hand, is intended to include all the elements of the population contributing to the Birth and Marriage Rates. It consists, therefore, of the Death-rate or civilian population plus all non-civilians enlisted from this country, whether serving at home or abroad. This non-civilian element has been distributed over all the districts in the country in proportion to their estimated civilian population.

3. The classification of some deaths is modified in the light of fuller information obtained from the certifying practitioner in response to special

enquiries. The principal subjects of these enquiries are indicated in a table published in Yearly Reports of the Registrar-General, and this possible source of discrepancy between the returns of the Registrar-General and those compiled locally should be borne in mind particularly in the cause of death dealt with in that Table."

Estimated Civil Population is 39,182.

•	Estimated for Middle						
Wards.	Census,	of 1	1919.	Estimated for			
,	1911.	Death Rate.	Birth Rate.	1920.			
CENTRAL	6,698	6,086	6,338	6,329			
WEST CENTRAL	3,947	3,700	3,802	3,847			
NORTH EAST	9,181	8,456	8,821	8,793			
NORTH WEST	7,055	7,083	7,392	7,365			
SOUTH EAST	6,882	6,422	6,704	6,678			
SOUTH WEST	6,569	5,934	6,195	6,170			
BOROUGH	40,332	37,681	39,252	39,182			

The Census Returns for 1911 give the following figures regarding Families or Separate Occupiers:—

Wards.	1911.
CENTRAL	1668
WEST CENTRAL	912
NORTH EAST	2165
NORTH WEST	1758
SOUTH EAST	1607
SOUTH WEST	1564
TOTAL	9674

# PHYSICAL FEATURES AND CENERAL CHARACTER OF THE DISTRICT.

The town of Darwen is situated in a valley, Latitude 53° 41′ 25″ N. and Longitude 2° 28′ 32″ W., and runs almost due north and south, being about five miles in extent, on the highway between Blackburn on the North and Bolton on the South. The centre of the town stands 500 feet above the sea level, the higher parts of the town reaching over 800 feet above sea level, its situation favouring the free circulation of air and free exposure to sunlight.

Generally speaking the main streets run north and south, making the town a very long one in comparison with its size and area. This is an

advantage, as the sun shines alternately on the front and back, as the case may be, thus influencing to a certain extent local currents of air by causing them to move first in one direction and then in the other according to the position of the sun. The front streets are 12 yards wide and the back streets are 4 yards wide. This latter is unfortunate. I have had occasion in a previous report to describe a venture on the part of a builder to give much more air space at the rear of the cottages by making the back yards in the form of gardens, much more than 12 yards wide to do away with intervening walls, and substituted privet hedges. The pleasure the occupants derive from these gardens is unbounded. They are more beautiful to look upon and do away with the depressing, monotonous old-fashioned back yards we are so accustomed to look upon, that the lives of the people are bettered, lengthened, and rendered more cheerful. The innovation certainly deserves the thanks of the community.

The minimum amount of yard space is 150 square feet.

The streets are all paved with setts. The side walks of the front streets are flagged and are 7ft. 6in. wide.

The soil on which the town is built consists of boulder clay overlaying the sandstone or shale of the coal measures. In the middle of the valley along the riverside, gravel and sand form the subsoil, the land rises up on each side of the moorland, that on the West side forming the gathering ground.

There is only one outlying district of any importance, viz.: Hoddlesden, situate at a distance of two miles to the east, with a population of about 731.

The town is well supplied with open spaces in spite of the fact that there is in no part of it any overcrowding of dwelling houses and practically no slum property. There are three large, well arranged, and beautifully laid out parks.

**SUNNYHURST WOOD**, situated at the north end of the town, consists of about 80 acres of well wooded land. This in its original state was really a natural park, open to the public by means of a footpath running through a valley bounded on both sides by well wooded slopes. Its acquisition was determined upon by Alderman Tomlinson, who secured, by subscriptions and donations, sufficient to buy the land for the town. It has been laid out, tended, planted, and set out without sacrificing any of its natural beauties, and yet brought well within the meaning of a park. Such are its attractions that it has become a source of great pleasure to crowds of people, who come from Blackburn to spend a few hours in its glades. It is the reason for excursion trains from many towns within a radius of thirty miles.

BOLD VENTURE PARK occupies a part of West Central Ward, being reached by way of Belgrave Road and Borough Road, reaching right up to the edge of the moors, covers 22½ acres of beautifully laid out gardens. A lake or pond for water fowl lies just within its gates, kept well supplied with water by means of a stream of pure water falling from the moors and uplands over cascades of nature's structure. The first part of this park ends in a cul-de-sac of rock, from which in former years much of the stone with which the town is built has been gathered. In front of this face of rock has been erected a fountain to the memory of the late James Huntington, subscribed by the workpeople at the paper works controlled by the said James Huntington. On a height to the north of this fountain stands the Gillibrand Meteorological Observatory, a station of the second class, the whole cost of the Observatory and Instruments being defrayed by a late Mayor. The park has been extended and now stretches to the foot of the Moor.

WHITEHALL PARK, at the southern end of the town and abutting on the Cemetery, consists of  $16\frac{1}{4}$  acres. This, one of nature's beauty spots, has year by year been improved by artificial means until it is now the focus of a large number of detached villas occupied by the wealthier citizens of the borough. The land slopes upwards to the moors. Just within its gates has been constructed a MUNICIPAL BOWLING GREEN, which appears to appeal to the public taste, as it is very popular and much used. This seems to me a step in the right direction, because it gets those who use it into the fresh air, supplies the exercise so necessary for the development of the body, without the contra attractions of the public house so often associated with this form of amusement. The first MUNICIPAL BOWLING GREEN to be established was in Everton Street, on the site of a public playground. This playground, representative of others in Olive Lane and Hanover Street, was a railed-in plot of land, the ground being of well trodden ashes, was principally used by young men, or immature men, for purposes of a rough kind of football in winter, nay very often throughout the year, although cricket was sometimes played in summer. The games played never appeared to be, even in practice, of such a nature as to develop scientific football, nor to bring forward promising young players to the attention of the football authorities, it was simply "horse-play," and its retention as a playground was not advisable.

The success of the Everton Street Bowling Green was such as to encourage the formation of the one at Whitehall and also on the Olive Lane site. The appearance in all cases is such as to form a great attraction to the public, and apart from the games played thereon they are invaluable as breathing spaces now retained permanently for the public good.

HANOVER STREET RECREATION GROUND.—This was made and furnished with swings for boys and girls under 12 years of age, but it is often invaded by men and older boys, who play at football, or at least kick it about in an inconsequential way, to the interference of the younger ones. I recommend in the place of these playgrounds that a few fields be taken in different parts of the borough to be used as playing-fields, say four or five schools to use the one field in the afternoon once a week, playing cricket in summer and football and hockey in winter under the supervision and tuition of the teachers.

The inhabitants are chiefly of the artizan and labouring classes, and are employed chiefly in cotton and paper mills.

Much has been said of the effect of weaving on the health of the people. As an industry it is inocuous. In many mills steam is introduced into the weaving shed. Some years ago I carried out some experiments on this matter in conjunction with Mr. F. Scarisbrick, and we were both called to give evidence before the Royal Commission on Steaming in Cotton Mills. The result of our enquiries was to show that within certain limits no harm was done. These limits are not exceeded in Darwen mills.

Area of town, 5,919 acres. Rateable value, end of the year to the Borough Rate, £189,588 10s. 0d. Assessable Value to the District Rate, £175,687 15s. 3d.

The town is divided into six Wards:—Central, West Central, North East, North West, South East and South West.

# Marriages.

The number of Marriages solemnized in Darwen during the year ending December 31st, 1920, was as follows:—

Church of England	296
Nonconformist Places of Worship	238
Total	534

This means that 1,068 people were united in the bonds of wedlock, and is at the rate of 27.25 per 1,000 of the population, as compared with 25.32 per 1,000 in the previous year.

Year. Bi		hs.	Dear	ths.	Marriages.		
T Gent.	Number.	Rate.	Number	Rate.	Number.	Rate.	
1883	1057	34.39	518	16.85	478	15.5	
1884	978	31.18	595	. 18.97	444	14.1	
1885	1015	31.99	489	15.41	480	_ 15.1	
1886	965	29.98	641	19.91	540	16.7	
1887	1000	30.77	716	22.03	558	16.6	
1888	994	29.67	600	17.90	616	18.2	
1889	972	28.17	544	15.76	570	16.5	
1890	1075	29.45	673	18.43	586	16.0	
1891	1115	32.60	660	19.30	648	18.7	
1892	1057	30.20	641	18.31	670	19.1	
1893	955	26.90	677	19.07	592	16.7	
1894	1039	28.86	542	15.05	640	17.7	
1895	1128	31.33	640	17.77	676	18.7	
1896	1032	28.15	627	17.10	696	18.9	
1897	1114	29.70	651	17.36	688	18.3	
1898	1131	30.16	632	16.85	700	18.6	
1899	1062	28.02	647	17.07	666	17.5	
1900	980	25.38	789	20.44	532	13.7	
1901	858	22.45	620	16.22	576	15.0	
1902	891	23.01	569	14.69	606	15.6	
1903	941	.24.05	501	12.80	612	15.6	
1904	820	20.75	606	15.33	606	15.3	
1905.	818	20.49	562	14.07	578	14.4	
1906	811	19.70	540	13.11	744	18.0	
1907	876	20.92	527	12.58	702	16.7	
1908	895	21.17	550	13.01	636	15.1	
1909	816	19.12	616	14.44	684	16.0	
1910	776	18.05	573	13.33	610	14.2	
1911	754	18.66	641	15.87	598	14.8	
1912	690	.16.99	563	13.86	710	17.5	
1913	738 ·	18.08	579	14.18	716	17.5	
1914	765	18.64	595	14.49	594	14.4	
1915	666	16.23	590	15.21	742	19.1	
1916	562	13.91	545	14.68	510	13.7	
1917	427	11.18	4.90	14.29	390	21.3	
1918	353	9.58	692	21.08	472	12.8	
1919	495	12.61	520	13.80	994	25.3	
1920	845	21.56	510	13.01	1068	27.2	
Average 39 Years	. 858	23.20	581	15.73	613	16.5	

Marriage has created a record for Darwen, 1,068 persons were united in matrimony. We should have something tangible in return for these in the year following the one under consideration. It is interesting to go back to 1883, practically forty years ago, when the marriages were 478 and the births were 978, which looks as if figures might be made to prove anything.

## Births.

The number of Children Born during the year was: Males 419, females 426, making a total of 845; being 350 more than in the previous twelve months, and at the rate of 8.95 per 1,000 higher than in 1919.

The Birth Rate for the year was 21.56 per 1,000. In January there was the highest birth rate, viz.: 30.11 per 1,000; and in November it was the lowest, the figure being 13.78 per 1,000.

Births numbered 845, the largest number since 1908, and the highest rate since 1903.

This is a matter for self-congratulation, because it appears to be the only way in which the population can grow in numbers. I am of the opinion a rapidly growing town in this respect is the most prosperous, and it would pay, as I have frequently insisted, to offer to large employers of labour facilities, such as free land, to open up works here. This would increase our population by the number of employees and create another figure for the natural increase.

TABLE showing the Estimated Populations, Number of Births, and the Birth-Rates for the Darwen Sanitary District since 1882 inclusive.

Year.	Estimated Population at the Middle of Each Year.	Total Births	Birth-Rate		
1801	3,587	• •			
1811	4,411	••			
1821	6.711				
1831	6,972	•••			
1841	9,348				
1851	11,702				
1861	16,492	•••			
1871	21,277				
1881	27,589				
1882	30,295	987	32.57		
1883	30,733	1057	34.39		
1884	31,360	<b>97</b> 8	31.18		
1885	31,720	1015	31.99		
1886	32,185	965	29.98		
1887	32,491	1000	30.77		
1888	<b>33,</b> 500	994	29.67		
1889	34,500	972	28.17		
1890	36,500	1075	29.45		
1891	34,192	1115	<b>32.6</b> 0		
1892	35,000	1057	30.20		
1893	35,500	955	26.90		
1894	36,000	1039	28.86		
1895	36,000	1128	31.33		
1896	36,652	1032	28.15		
1897	37,500	1114	29.70		
1898	37,500	1131	30.16		
1899	37,900	1062	28.02		
1900	38,600	980	25.38		
1901	38,212	858	$22\ 45$		
1902	38,712	891	23.01		
1903	39,114	941	24.05		
1904	39,516	820	20.75		
1905	39,918	818	20.49		
1906	41,164	811	19.70		
1907	41,864	876	20.92		
1908	42,266	895	21.17		
1909	42,668	816	19.12		
1910	43,000	776	18.05		
1911	40,398	756	18.71		
1912	40,611	<b>69</b> 0	16.99		
1913	40,824	738	18.08		
1914	41,038	765	18.64		
1915	41,038	666	16.23		
1916	40,381	562	13.91		
1917	38,210	447	11.18		
1918	36,814	353	9.58		
1919	39,252	495	12.61		
1920	39,182	845	21.56		

Average for the last 39 years, 24.02.

BIRTH-RATES IN THE VARIOUS WARDS.

Year.	C.	W.C.	N.E.	N.W.	S.E.	S.W.	Borough.
1901	22.45	22.25	19.94	24.78	20.26	23.53	21.54
1902	24.8	19.1	24.2	21.4	20.9	24.6	23.0
1903	26.2	21.4	26.3	19.9	23.8	23.3	24.0
1904	19.3	18.8	22.4	25.4	19.8	18.4	20.7
1905	17.8	23.1	23.5	20.4	18.0	19.8	20.4
1906	19.23	19.25	21 11	19.82	17.47	20.53	19.70
1907	16.18	23.63	22.14	23.63	20.58	20.92	20.92
1908	17.72	20.65	22.89	23.41	23.34	18.97	21.17
1909	17.82	21.85	18.74	21.25	19.60	17.44	19.12
1910	14.76	20.35	20.57	22.61	17.77	13.63	18.05
1911	16.29	20.76	20.02	16.60	18.86	20.26	18.71
1912	16.49	17.94	18.69	16.00	14.86	17.90	16.99
1913	17.15	17.14	20.95	15.16	18.22	18.75	18.08
1914	19.91	19.62	18.65	16.43	19.26	18.68	18.64
1915	16.59	13.33	18.65	12.03	19.98	15.13	16.23
1916	14.10	9.97	14.98	11.05	14.64	17.26	13.91
1917	11.82	10.54	13.74	8.75	10.27	11.11	11.18
1918	8.74	9.81	10.15	9.08	9.54	10.17	9.58
1919	12.30	12.36	14 74	9.39	14.17	12.27	12.61
1920	22.43	18.71	24.90	17.51	22.76	21.23	21.56
Averages for 20 Years.	17.60	18.02	19.86	17.73	18.20	18.19	18.30

#### ILLEGITIMATE BIRTHS.

35 Children were born out of wedlock during the year. This gives a rate of 4.14 per cent. of total births of erroneously called "Love Babies." Since 1901 the average annual number is 23.

The rate per cent. of Births averages 3.30, and 1916 is the highest with 4.80.

The Infantile Mortality Rate of Illegitimates for the year was 171 and the average for the last 16 years was 195. The highest rate of Mortality was in 1911, when it was 348 per 1,000 births; this was a particularly fatal year for infant life.

TABLE showing number of Illegitimate Births, etc., during the past twenty years.

Year.	Number of Births.	Rate % of Total Births.	No. of Deaths under 1 Year.	Death-rate per 1,000 Births.					
1901	21	2.45	• • • •						
1902	22	2.47		•••					
1903	23	2.44	•••	•••					
1904	$\frac{1}{3}$	$\frac{2.11}{4.02}$	• • •						
1905	$\frac{3}{25}$	3.06	<b></b> 8	320					
1906	$\frac{28}{28}$	3.45	$\overset{\circ}{6}$	214					
1907	$\frac{20}{29}$	3.31	5	172					
1908	18	2.01	6	333					
1909	29	$\frac{2.01}{3.55}$		138					
1910	16	2.06	$rac{4}{5}$	313					
1911	$\overset{10}{25}$	3.31	8						
1912	18	2.61	3	348					
1913	$\frac{10}{21}$	2.85	5 5	167					
1914	28	$\frac{2.65}{3.66}$		238					
1915	20		2	71					
1916	$\frac{20}{27}$	3.00	$\frac{2}{2}$	100					
1917		4.80	0	0					
1917	17	3.96	$egin{array}{cccccccccccccccccccccccccccccccccccc$	118					
	16	4.53	3	188					
1919	22	4 44		$\frac{227}{2}$					
1920	35	4.14	6	171					
Average	23	3.30	4	195					

#### ILLECITIMATE BIRTHS.

	Number.	Percentage of Births.
JANUARY	3	3.00
FEBRUARY	1	1.81
MARCH	3	3.00
<b>A</b> PRIL	4.	6.15
MAY	3	3.45
JUNE	2	3.28
JULY	2	2.63
AUGUST	1	1.43
SEPTEMBER	1	1.59
OCTOBER	1	1.47
NOVEMBER	$2^{'}$	4.44
DECEMBER	12	15.58
	35	4.14

# BIRTHS IN WARDS, 1920.

	Cen	tral.	We	est- tral.	1	rth- ast.	1	rth- est.		ith- ist.		est.	To	otal.	Rate per 1,000 estimated Population
	M.	F.	M.	F,	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
January February March April May June July August September October November December	6 5 9 5 . 4 6 6	6 5 3 4 11 6 9 6 3 4 3 6	2 3  4 5 4 2 2 2 1 4	8 2 4 4 2 7 1 2 3 1 7	19 4 13 11 15 12 7 8 6 7 5 8	11 10 11 7 11 5 7 10 11 8 3 10	7 1 5 4 9 2 7 9 5 2 6 3	7 5 9 7 6 4 7 8 4 4 4 4	7 5 7 - 4 3 8 7 7 9 9 3 3	6 9 6 9 7 3 5 4 6 8 11 6	11 2 3 4 9 2 4 5 5 11 2 9	9 3 6 5 3 6 7 6 4 4 1 10	53 21 38 29 45 38 34 35 33 37 22 34	47 34 37 36 42 26 42 35 30 31 23 43	30.11 16.84 22.97 19.90 26.64 19.60 23.27 21.43 19.29 20.82 13.78 23.57
	76	66	29	43	115	104	60	69	72	80	67	64	419	426	21.56
TOTAL	1	42	7	2	2	219	12	9	15	2	13	1	8	45	
Population Birth-rate	6,3	329 .43	3,8 18.	347 .71	_	<b>793</b> .90	1	365 .51	_	378 .76		170 .23	39, 21	182 .56	F

The following Table shows the number of Births and the percentage of these attended by Medical Men during the last twenty years:—

Vocas	No. of Births	Attended by Medical Men					
Years	No. of births	Number	Percentage				
1901	858	420	48.95				
1902	891	401	45.00				
1903	941	461	$48.99^{'}$				
1904	820	421	51.34				
1905	818	411	50.24				
1906	811	376	46.36				
1907	876	394	44.97				
1908	895	$427$ $\cdot$	47.71				
1909	816	389	47.67				
1910	776	352	45.36				
1911	756	359	46.30				
1912	690	288	41.74				
1913	738	363	49.19				
1914	765	337	44.05				
1915	666	269	40.39				
1916	562	243	43.24				
1917	427.	173	40.51				
1918	353	156	44.19				
1919	495	211	42.63				
1920	845	403	47.69				

### Deaths.

The total number of Deaths during the year was 510; males 219, females 291; being a decrease of 10 on the previous year.

The Death Rate for the year is 13.01, a decrease of 0.79 on the previous year.

The number of Deaths of Residents in Institutions outside the district was 97, which has been added to the 413 deaths registered within the district, making a total of 510.

These Deaths are reported to me quarterly by the Registrar General, through the County Medical Officer of Health.

Fourteen Deaths of Non-Residents occurred in the town during the year.

**INQUESTS.** There were 40 Inquests held during the year, compared with 26 during 1919. The following were the verdicts:—

	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Accidental Death	9	18	17	14	22	20	15	16	12	17
Natural Cause	7	6	24	8	7	6	3	8	12	14
Suicide	11	4	4	8	9	4	4	2	2	9
	27	28	45	30	38	30	22	26	26	40

### Death-Rates per 1,000 of the Population in the various Wards of the Borough.

Wards		West-	North-	North-	South-	South-	Death-
Population	Central 6329	Central 3847	East 8 <b>7</b> 93	West 7365	East 6678	West 6170	Rate per month
1920							
January	22 75	12.47	15.01	4.88	5.39	11.66	11.94
February	15.17	6.24	10.91	13.03	12.42	11.66	11.94
March		9.36	9.55	13.03	10.78	19.45	1286
April	17.06	9.36	17.74	11.40	10.78	35.01	17.15
May	15.17	15.59	16.37	4.88	12.42	17.50	13.47
June	17.06	$6\ 24$	16.37	4.88	12.42	7.78	11.33
July	5.68	15.59	2.74	4.88	12.42	1.94	6.43
August	7.58	9.36	4.09	6.51	7 18	7.78	6 73
September	11.37	3.12	4.09	14.66	8.99	7.78	8 57
October	9.48	6.24	8.18	9.77	12 42	1.94	8.26
November	7 58	12.47	10.91	8.14	16.17	7.78	10.41
December	13 27	3.12	10 91	4.88	5 39	3.89	7.35
Transfers	17.06	43.72	32.75	39 10	28 75	19.45	29.71
Rate for year	14.53	12.73	13 30	11.40	13 01	12.80	13.01

### Death-Rates in the Various Wards for the past 27 Years.

Year	C.	W.C.	N.E.	N.W.	S.E.	S W.	Borough.
1894	14.66	15,22	15.54	13.04	16.96	14.63	15,0
1895	17.0	17,39	20,6	12,33	17.65	19.82	17.7
1896	12.8	17.8	16.4	17.5	19.8	19.2	17.1
1897	17.52	15.22	18.16	16,14	18,37	18.64	17,3
1898	16.09	18.58	17.82	14.99	15.51	18.0	16.8
1899	18.45	15,80	15.38	12,50	20.85	18,05	17.0
1900	20.78	17 28	21.40	21.09	20.03	20.50	20,4
. 1901	17.92	17.36	14.21	17.05	18.46	13.83	20.8
1902	13.13	15,78	14.13	13.60	14,11	17.34	14,6
1903 .	14.13	13.95	11.67	12,97	11.85	13.17	12.8
1904	14 12	15.21	14.52	20.50	14.54	14.54	15.2
1905	13.30	14,15	13.24	16.67	15,41	12.84	14.0
1906	11.40	12.83	14.66	11,68	12.52	14.64	13.11
1907	12.79	12,55	12.27	15.69	10.86	12.07	12.58
1908	11.77	13.28	13,46	15.31	11.32	13,39	1301
1909	12.58	18,16	11.22	17.74	15.26	15.47	14.44
1910	15.02	16.18	11,67	14.37	11.51	13.24	13,33
1911	17.93	18.23	16.32	13.23	12.47	18,13	15,87
1912	14.09	15,92	12.83	12.99	13.99	14.69	13.86
1913	12.33	15.12	14.22	14.76	14,79	14.14	14,18
1914	13.73	10,31	16.15	13.19	+5.12	16.37	14.49
1915	17.56	15.49	15.17	14,54	13,01	15.72	15,21
1916	17.34	13,99	15.85	15.48	12.01	12,66	14,68
1917	15,35	9.80	17.68	12.88	13.01	14.26	14.29
1918	21,67	20,46	23,60	16.19	21.25	22,81	21,08
1919	14.13	11,89	16.31	12.14	12.58	14,32	13.80
1920	14.53	12,73	13.30	11.40	13.01	12.80	13.01
Average	15.26	15.21	15.47	14.81	15.04	15.75	15.39

#### CAUSES OF DEATH IN DARWEN, M.B., 1920.

Causes of Death (Civilians only).	Males.	Females.
All Causes.	219	291
1. Enteric Fever		• • •
2. Small Pox		• • •
3. Measles		2
4. Scarlet Fever		• • •
5. Whooping Cough	 a	• • •
6. Diphtheria and Croup	$\frac{2}{6}$	• • •
8. Erysipelas	~	
9. Pulmonary Tuberculosis	14	9
10. Tubercular Meningitis	3	$\frac{9}{2}$
11. Other Tuberculous Diseases	4	$\frac{2}{3}$
12. Cancer, Malignant Disease	$1\overline{4}$	39
13. Rheumatic Fever	ī	50
14. Meningitis	$\frac{1}{2}$	
15. Organic Heart Disease	22	49
16. Bronchitis	15	28
17. Pneumonia (all forms)	20	13
18. Other Respiratory Diseases	1	• • •
19. Diarrhœa, etc. (under 2 years)	4	1
20. Appendicitis and Typhlitis	2	2
21. Cirrhosis of Liver	1	
21a. Alcoholism	• • •	
22. Nephritis and Bright's Disease	10	6
23. Puerperal Fever		4
24. Parturition (apart from Puerperal Fever)		$\frac{2}{2}$
25. Congenital Debility, etc	$\frac{19}{10}$	24
26. Violence (apart from Suicide)	$\frac{10}{7}$	5
27. Suicide 28. Other Defined Diseases	•	$\frac{2}{93}$
29. Causes Ill-Defined or Unknown	$\frac{58}{4}$	90
	Andrea	• •
Special Causes (included above)—		
Cerebro-Spinal Fever	• • •	
Poliomyelitis	• • •	• • •
Deaths of Infants under 1 year of age-		2.5
Total	44	35
Illegitimate	2	• 4
Total Births	419	426
Legitimate		405
Illegitimate	14	21

Population—For Births and Deaths ... 39,182

The death-rate for the year was 13.01 per 1,000, the same as in 1908. It has been lower on only two occasions, viz., in 1903 and 1907.

The highest was in 1918, when it was 21.08 per 1,000, due to an extraordinary epidemic of Influenza; also in the years 1900 and 1901, when the rates were 20.4 and 20.8.

The average for the last 27 years was 15.39 per 1,000, and very nearly the same as in 1894, when it was 15.0 per 1,000 for the year.

There is a decided improvement in the death-rate, for which we may congratulate ourselves.

The causes of death were:—Measles 2, Influenza 13, Consumption 23, other Tubercular Diseases 12, Cancer 53, Heart Disease 71, Diarrhœa (under 2 years) 5, Pneumonia 33, Bronchitis 43.

#### POOR LAW ADMINISTRATION

Comes under the Blackburn Union, which consists of sixty members, of which eight are sent from and represent Darwen.

#### MEDICAL RELIEF.

The Darwen District Nursing Association was instituted in 1890, under the auspices of the late Lady Huntington. It is carried on by voluntary contributions collected in the Mills, Churches, Chapels and from private sources, under a Management Committee, consisting of thirty-one ladies and gentlemen. There is a General Committee of ninety-six ladies and gentlemen.

Amount Collected	l.		Amount Expended.	
Year. $\pounds$ .	S.	d.	Year. £. s.	d.
$1911 \dots 1286$	0	0	19111051 0	0
$1912 \dots 665$	0	0	$1912  \dots  722  0$	0
1913990	16	4	1913 930 18	11
19141070	2	5	1914 891 15	1
1915 759	13	11	1915 688 13	11
1916 670	17	1	1916 607 11	5
1917 559	8	4	1917 615 12	0
1918 799	0	9	1918 751 16	4
19191435	15	11	19191070 16	6
1920	12	1	$1920 \dots 1552 9$	5

There are about six Nurses, including those doing Maternity Work. The work is done under the close supervision of the local medical men and is of a very high character.

CHARGES. Maternity cases: 15s., 21s. and 25s. for cases outside but bordering on the borough boundary.

Ordinary nursing cases: No charge made, but patients are encouraged to give a donation. Cases which can afford are not nursed (except occasionally, and then only until a resident or other nurse can be obtained).

During the year the following additional work has been undertaken by the Association:—An Orthopædic Clinic for treatment of ex-Service men has been opened; the Nursing of Measles, etc., for the Corporation; taken trained nurses as pupils for practical work for C.M.B. Certificates.

#### THE BLACKBURN AND EAST LANCASHIRE ROYAL INFIRMARY

Is an Institution standing at the Southern end of the neighbouring County Borough of Blackburn.

Darwen has not a particular number of beds at its disposal; every case sent from here is admitted without question.

In the majority of mills and workshops of the district the workpeople contribute under a scheme of weekly contributions, known as the East Lancashire Workpeople's Hospital Fund. The Committee governing this fund allocate the nett contributions between the Royal Infirmary and other kindred Charitable Organisations. In addition to this, collections are periodically made in the various Churches and Chapels, and other sources also contribute.

The Secretary, Mr. Nathan A. Smith, supplied the following information of patients from Darwen treated in the Institution.

	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
In-Patients	225	221	242	242	259	281	247	276	345	356
Out-Patients	402	449	460	498	565	621	623	663	722	700

Based upon the ordinary expenditure for the year, the Cost of Treatment of these Patients was £3,300.

# SANITARY CIRCUMSTANCES OF THE DISTRICT. WATER SUPPLY

Is obtained from two reservoirs, the Sunnyhurst Hey and Dean. In both cases it is passed through sand filters. Where land on the gathering ground is under cultivation, it is not manured nearer the edge of a reservoir than 100 yards.

The water is collected mostly from Moorland. Many years ago some cases of lead poisoning were discovered in the town, so the water was tested in its action on lead by Prof. Frankland, who found it had a solvent action on lead pipes. He recommended lime to be added to the water in certain proportions, and plumbism has not been diagnosed since.

By agreement with Bolton Corporation, under an Act obtained in 1905, we receive 300,000 gallons per day. This is piped from a reservoir on Turton Moor,, along the main highway, to an underground reservoir situate at Bull Hill, made of reinforced concrete, ventilated on the top by a number of 6 inch drain pipes fixed in openings. To prevent dust being blown in, these pipes are covered with hoods made of sanitary ware and perforated with a number of small openings.

The pipe line passes the boundary of Bull Hill Isolation Hospital. From this point it is pumped to a tank within the grounds on a higher level than the buildings, so that it commands these in case of fire, and is used for domestic purposes.

The following sample was taken from a well at Bull Hill which supplies the neighbouring householders. Since this was done, town's water has been put in to the property:—

#### COUNTY ANALYST'S REPORT.

To Inspector W. E. Marsden, Sanitary Inspector, Darwen.

I have analysed the Sample of Water received from Insp. Marsden, per rail on the 9th day of March, 1920, with the following results expressed in parts per 100,000—

Mark or denomination of Sample, None.

Total Solids in Solution, 12.4.

Oxygen absorbed from Permanganate in 15 mins., .008.

Oxygen absorbed from Permanganate in 3 hours, .016.

Ammonia, Nil.

Albuminoid Ammonia, .005.

Nitrogen as Nitrates, .218.

,, as Nitrites, Nil.

Combined Chlorine, 1.3.

The sample had a stagnant odour and the well probably requires cleaning out.

There is no evidence of sewage pollution, and apart from the smell above mentioned, the water is fit for drinking and domestic use.

W. COLLINGWOOD WILLIAMS, B.Sc., F.I.C., County Analyst.

The water is of sufficient quantity, and of good quality.

The amount used during the year was 354,571,000 gallons; 54,249,000 being for trade purposes, the remainder for domestic use at the rate of 20.9 gallons per head per day.

The total Rainfall for the year on the Watershed was 50.61 inches, and in Bold Venture Park 56.06 inches. We had rain on 231 days.

The heaviest Rainfall was in May, with 8.04 inches, and the lowest in October, with 1.72 inches.

#### RIVERS AND STREAMS.

The River Darwen runs northward through the valley.

River Pollution continues to a certain extent from mills and paper works. Occasionally steam is thrown in from mills when the steam boilers are being blown off and emptied. This escapes into the air at points where the river is not covered-in, causing somewhat of a nuisance. No doubt a great improvement would be made if the bed of the river were paved and the stream itself arched over.

#### DRAINACE AND SEWERACE.

I consider the sewers are of the first order in regard to structure and maintenance. In some of the old parts of the town the drains may not be up-to-date in the form of construction; this is occasionally revealed during alterations, etc. These are re-constructed as soon as possible.

At the Sewage Disposal Works the Bacteriological Treatment is in vogue and appears to be very satisfactory.

#### CLOSET ACCOMMODATION.

The following constitutes the accommodation in this respect at the end of the year in question:—

Pails 1729	
Water Closets 6458	
Waste Water Closets 2471	
Privies 2	
Total	
New Water Closets fixed	24
Water Closets dismantled	0
	18
Premises with more than one New Closet fixed	2
Pails converted to Water Closets	30
Waste Water Closets converted to Water Closets	4
Baths installed during the year	22

#### SCAVENCING.

The Scavenging of the town and the Removal of Refuse is carried out by the Corporation. Refuse from houses, shops, etc., is regularly collected and conveyed in covered carts to the Destructor and there burnt in a Meldrum's Destructor.

- There are 12 Dry Ashpits and 10,450 portable refuse receptacles, the majority of which are ashes tubs and placed under covered sheds in the yards.

#### SANITARY INSPECTION OF DISTRICTS.

The following Tables give a list of inspections, notices served and result, as required to be furnished to the Medical Officer under Article 20, Sec. 16 of Sanitary Officers' Order of 1910:—

#### SOUTHERN DISTRICT.

	Number		ber of Served.	Rest	ult of Se	rvice of Not	tices.	
Nature of Inspections.	of Inspec- tions.	Legal.	Prelim-	Nuisan-	Remain-	Prosecutions.		
	tions.	negar.	inary.	abated.	hand.	Instituted.	Pending	
Dwelling Houses	2127	262	324	398	48			
Houses under Housing, &c., Act	94	• • •	• • •		• • •		• • •	
Factories and Workshops	334	4.		4		1		
Bakehouses		2		2			• • •	
Dairies and Cowsheds		23	7	25	3			
Smoke Observations		1		· • •	• • •	1		
Infectious Diseases	1 ·	• • •			• • •			
Nuisances—							•••	
Defective Drains	56	9	50	53	3	• • •		
Defective Slop Gullies	)	13	20	25	4		•••	
Defective W.C.'s	15	10	13	14	î		***	
Defective Easing Troughs, &c		24	67	86	$1\overline{2}$	•••	•••	
Insanitary Yards		6	12	11	1	•••	* * *	
Dirty Premises		20	20	27	$\frac{1}{2}$	•••	• • •	
Dilapidated Closets		15	14	20	3	***	• • •	
Accumulations of Refuse	_	21	38	54	6	•••	• • •	
Nuisances from Animals		2	8	7	1	• • •	• • •	
Nuisances from Manure Pits	_	$\frac{2}{2}$	$\frac{3}{2}$	1	1	•••	•••	
Ashtubs without Covers	1	6	$\frac{2}{6}$	7	1	***	•••	
	,				0	• • •	• • •	
Broken Slop Pipes		15	27	27	2		•••	
Choked W.W.C.'s		13	12	18	1	•••	•••	
Broken Ashtubs	1	9	8	9	•••	•••	•••	
Dangerous Closet Walls, &c		3	3	3	•••	• • •	• • •	
Insanitary Pails	14	$\frac{12}{2}$	10	14	• • •	•••	•••	
Defective Roofage	. 5	3	$\frac{5}{1}$	4	1.	• • •	•••	
Defective Windows		4.	6	6		• • •		
Defective Closet Recep. Doors	. 21	13	8	12	9	•••	•••	

WILLIAM E. MARSDEN,

Cert. Royal San. Ins.

# NORTHERN DISTRICT.

Number and Nature of Inspections	Number	Notices	Served.	Nuisances	Nuisances
made.	Inspections.	Legal.	Preliminary	Abated.	remaining in hand.
Dwelling Houses	2522	•••			
Dwelling Houses (under Town.				-	
Planning Act	60	• • •	• • •	•••	• • •
Schools and Public Buildings	. 60	• • •	•••	• • •	
Factories and Workshops		2	13	13	• • •
Dairies and Cowsheds	60	21	21	20	1
Smoke Observations		3	3	3	• • •
Bakehouses		2	2	2	• • •
Lodging House		• • •	•••	•••	•••
Refuse Tips	74	• • •	•••	•••	•••
Infectious Diseases—	108			•	
Cases Visited		•••	•••	•••	•••
Rooms Disinfected		•••		•••	• • •
Loads of Bedding Removed	36	•••	1		•••
Nuisances—	Discovered				
Defective Drains		15	45	<b>3</b> 8	12
", Slop Gullies		7	12	12	6
", Soil Pipes, W.C.'s, etc		6	12	15	3
" Troughs & Downspouts		25	124	109	19
Insanitary Yards	18	3	15	14	4
Dirty Houses, etc	. 18	18	16	16	2
Dirty Closets	15	$\frac{2}{2}$	14	11	4
Accumulation of Refuse		2	27	29	$\frac{2}{2}$
Nuisance from Animals	10	0	$\frac{7}{1}$	10	0
Dangerous Buildings	19	0	15	$\frac{13}{2}$	6
Ashtubs without Covers	19	0	11	9	6
Broken Slop Pipes		2	40	40	9
Choked Waste Water Closets		8	20	$\frac{21}{7}$	4
Insufficient Ventilation of Rooms	$\frac{9}{4}$	9	6		$\frac{2}{0}$
Dirty Bedding		4	4	4	0
Choked Sewers		- 0	3	3	0
Burst Water Pipes		0	10	7	3
Defective Gas Pipes	5	0	5	5	0

C. R. WALSH, M. R. San. Ins.,

Inspector of Nuisances.

#### BYE-LAWS IN RECARD TO PREMISES AND OCCUPATION.

LODGING HOUSES.—The Municipal Model Lodging House is the only common lodging house in the town, and is frequently visited and inspected by Inspector Walsh.

The average daily number of lodgers for the year was 90.02, including women, as compared with 66.97 for the previous year, an increase of 23.05.

#### OFFENSIVE TRADES.

Gut-scraping is carried out by one firm in a satisfactory manner in premises at the Public Slaughter House.

Two private firms rent premises from the Corporation which they use for Tripe preparing and boiling.

These are the only offensive trades in the Borough and are kept under constant supervision.

### OTHER SANITARY CONDITIONS REQUIRING NOTICE.

No sanitary improvements worthy of special note have been carried out during the year under review.

The chief sanitary requirement of the district, which is urgently needed, is the conversion of the remaining pail closets to the water carriage system where sewers are available.

#### SCHOOLS.

The whole of the 21 Elementary Day Schools were regularly visited by me as School Medical Officer, and during each vacation the Inspectors of Nuisances visited the premises in their respective districts to examine the sanitary arrangements and see that the Schools had been cleansed in accordance with my instructions. All walls are swept down; floors, desks, and other woodwork thoroughly scrubbed and washed with a solution of disinfectants. The caretakers have done their best during the short vacations, and generally speaking, the buildings have been fairly satisfactory.

In a few instances the surface of the playgrounds is in need of repair.

The whole of the Schools are supplied with town's water, and the lighting and ventilation is efficient.

During the year there have been the following cases notified at School Age:—Diphtheria 13; Erysipelas 1; Tuberculosis 3; Pneumonia 3; Scarlet Fever 28; Measles 79; and it was not found necessary to close any School on this account.

# Food.

#### MILK SUPPLY

Is fairly satisfactory. The supervision of this article of food, with other foods, is in the hands of the County Police and the Sanitary Inspectors.

It is not difficult to ascertain the character of a farm if one looks at the conveyance in which the farmer retails his milk. If the vehicle and the milk appliances are dirty, not in order, and lacking in polish, if the animal in the shafts is, or appears to be, untended and showing an absence of grooming; if the harness and clothing of the milk vendor are untidy one may assume that things at home are not in a satisfactory condition. I do not think the fault lies in the quality of the milk being below its required value so much as in an absence of perfect cleanliness. One may look through a cotton mill and come to the conclusion it is clean; whilst an isolation hospital when compared with the cotton mill would be classed as decidedly unsatisfactory in regard to scientific cleanliness, so it is with farms and dairies; they should be looked upon from the standpoint of a hospital, and not from that of a cotton mill. We want our milk to show an absence of the collection of particles of dirt at the bottom of the milk vessel after standing a few hours. To arrive at this, acting under the instructions of the Health Committee, I have issued the following instructions.

THE COWS should be healthy, and to that end should be kept as much as possible in the open-air. Farmers are advised to buy only cows about the health of which they have no doubt, and to keep cows which may happen to fall ill, isolated from other cows; they must be kept clean, and for this purpose plenty of good bedding must be provided and renewed as often as necessary.

UDDERS AND TEATS.—As the source of contamination is either dirty or diseased udders, these must be cleaned with a damp cloth before milking. If the udder is soiled so that it cannot be cleaned in this way, it should be washed with warm water and soap and then care-

fully dried with a clean dry cloth. Many farmers object to do this, under the impression that it will curtail the supply of milk. This appears to me a mistake, as the cows lie on the ground in the openair in all states of the weather, the udder coming into close contact with the cold wet ground, which is more likely to influence the flow of milk than is the method of cleansing above suggested.

The farmers should be instructed to examine the cow's udders and teats after every milking for any unusual lump or swelling, as these are the more readily recognised after milking than before.

If anything suspicious is found or there is obvious disease of udder or teats, the milk must not be sold for human consumption until the advice of a Veterinary Surgeon has been obtained and his decision given that it is safe to so use it.

THE MILKER.—The sources of contamination is in the clothes, the hands, or through the illness of the milker. To prevent danger he or she must wash his or her hands before milking, using a stiff brush to cleanse underneath the nails.

Soap, towels and clean water must be provided in a convenient place for this purpose. The absence of suitable provision for this will be taken as evidence that these instructions are not being carried out. Clean linen overalls or smocks should be worn when, and only when, milking. Persons who are ill or have sickness at home should in no way have anything to do with the cows until the sanction of a medical man has been obtained that it is safe to do so.

THE COW SHED should be so lighted that every part is easily visible in the day time, when the doors are closed; should be so ventilated that the air in it will not feel close, or have a disagreeable smell when the cows are housed and the doors are shut. Cows, like ourselves, will not suffer from free ventilation if it is steadily maintained throughout the year.

It should be kept free from dust, especially during milking.

The manure must be removed from the cowshed as often as required, this being not less than twice a day; the liquid manure channels must be cleansed frequently with water.

The milk must not be left standing in the cowshed, but immediately removed as occasion requires to a suitably clean place, strained and cooled.

be thoroughly and easily cleaned, the lids should be close fitting and dust-proof. All cloths used for cleaning milk vessels must be frequently wrung out of clean water and boiled at least once a day. These utensils should be kept for milk alone, and not used for any other purpose. An efficient sieve must be provided for straining milk and must be maintained in a thoroughly clean condition; muslin or other similar material must be used with the sieve, then washed and scalded after each operation.

In summer time special precautions must be taken to prevent house flies from getting to the milk.

ALL VEHICLES used for distributing the milk must be kept as clean as possible and provided with special receptacles for the measures, &c., with a lid attached to keep out dust, &c.

The condition of milk carts, utensils, gears, horses, &c. will be taken as an indication of the state of all the other parts appertaining to the milk industry.

Yours truly,

F. G. HAWORTH,

Medical Officer of Health.

The Bye-Laws in regard to the cubic area for each beast state this must be 600 c.f.; the Model Bye-Laws require 800 c.f.

Until the cows are groomed as carefully as are horses in the best stables, we shall not see our cowsheds in that sanitary state of cleanliness necessary for the production and supply of a pure milk. The two must go together.

The total number of Cowkeepers on the register is 103, and 4 other Purveyors of Milk. There are also a number of farmers residing outside the confines of the Borough who retail their milk in Darwen; their farms, of course, are under the supervision of other authorities.

The total number of Inspections made during the year to the various farms by the Sanitary Inspectors was 207.

Many repairs and improvements in the lighting, ventilation and drainage of cowsheds were effected.

The Inspectors periodically take samples for analysis. One was found slightly deficient in cream fat, but the Analyst advised us not to prosecute.

Three contained appreciable amounts of cow-dung. Obviously these pointed to pollution from dirty hands, dirty animals, or dirty utensils. The Inspectors follow up all these cases by visiting the farms and making an examination in each case for the probable source. Copies of the Regulations are left and instructions are given as to the best course for avoiding pollution and infection.

The Borough Veterinary Inspector is called in as occasion requires.

#### MILK (MOTHERS' AND CHILDREN'S) ORDER, 1919.

My Committee made arrangements for the supply of milk for expectant and nursing mothers, and of milk for children under 5 years of age, according to the terms of the Order.

Applications were made for milk at the office of the Health Visitor. After enquiries have been made of the circumstances and total income of each family, and corroborated at the mills and workshops where the applicants were employed, it was found absolutely necessary for me to make grants in 159 of the cases.

The approximate cost of supplying milk to these cases during the year was £460.

#### MEAT.

Animals brought to the Abattoirs are carefully examined both before and after slaughter by the Meat Inspector. There was a distinct improvement noticeable in the quality after the Food Control Regulations were removed.

The Public Abattoirs situated off Police Street, and the Pig Slaughter-houses in James Street West afford ample accommodation both in regard to lairages and slaughter-houses. Improvements in the buildings have been effected during the year.

There is only one Licensed Private Slaughter-house in the Borough occupied by a wholesale butcher. The work of the Inspector is therefore greatly facilitated, and better oversight is ensured.

It was found necessary to prosecute one farmer for killing a pig in unregistered premises. A fine of 10s. was imposed.

TUBERCULOSIS.—Twenty-five carcases were found to be affected in varying degrees with this disease. The total weight of meat condemned and destroyed for this reason amounted to 2,148lbs.

FOR OTHER CAUSES.—4,403lbs. of meat were condemned and destroyed.

#### NUMBER OF SLAUGHTER-HOUSES IN USE IN THE DISTRICT.

	In	I	n January,	II	n December,
	1914.		1920.	AR	1920.
Registered	2		2	• • • • • •	2
Licensed	1	• • • • • •	1		1
Total	3	• • • • •	3	• • • • •	3

#### OTHER FOODS.

Oversight is constantly exercised over all premises where food is prepared and retailed, and it was found necessary to condemn and destroy 20 stones of fish, 160lbs. of pears, 18 tins of condensed milk, 10 bags of tripe, 15lbs. of butter.

There are 90 Bakehouses in the Borough, 9 of these are owned and worked by persons carrying on a wholesale trade. These premises are regularly visited and the regulations regarding these workshops were enforced. Defects of a structural nature were remedied, and the lighting and ventilation appeared to be efficient.

There were four Underground Bakehouses in use at the end of the year.

#### SALE OF FOOD AND DRUCS ACTS.

There were 23 samples of milk purchased for purposes of analysis. Unfortunately 2 bottles containing the samples were broken in transit to the Analyst. Upon examination, 20 were declared to be genuine samples of milk. In one instance the Analyst made the following comment: "Very slightly deficient in cream; fat 2.92 per cent; contained cowdung 2 parts per 100,000 by volume." Two other samples contained cowdung. In one case 2.5 parts per 100,000, and in another 3 parts per 100,000 by volume. The Analyst did not recommend legal proceedings. The remaining samples were clean and free from preservatives.

# Notification of Infectious Diseases.

The following were reported to me during the year:—

]	Diphtheria	18
	Erysipelas	9
	Scarlet Fever	
′	Typhoid Fever	2
(	Ophthalmia Neonatorum	3
	Puerperal Fever	3
	Pneumonia	10
	Malaria	5
	Measles and German Measles	126
,	Tuberculosis	32
	Total	245

#### CASES REPORTED IN—

Year.	Diphtheria and Croup	Erysipelas	Scarlet Fever	Typhoid Fever	Continued Fever	Fuerperal Fever	Smallpox	Chicken-pox	Tuberculosis	Ophthalmia Neonatorum	Cerebro Spn. Meningitis	Measles and G. Measles	Pneumonia	Malaria	Trench Fever	Total.
1888			225	39	7		19									283
1889			158	20			2				• • •					180
1890	3	• • •	<b>7</b> 8	26						,	• • •					107
1891	1		39	50									• • •			90
1892	4 • •		257	53			1				•••	• • •				311
1893	5	5	242	29			6									287
1894	7	5	126	40	1	<b>2</b>	5									186
1895	11	27	46	36	2	8					• • •	•••				130
1896	12	70	139	33	3	9			ļ		• • •		• • •			266
1897	5	56	101	41	1	12	•••				•••	• • • •	•••	• • • •		216
1898	8	35	93	43	3	10	••;			•••	•••	• • •	•••	•••		192
1899	12	31	400	55	•••	7	•••	••	•••		•••	• • •	• • •	•••		505
1900	190	27	276	33	1	4	•••		•••	•••	• • •	•••	• • •	•••	•••	531
1901	207	34	231	21	3	1			•••			•••	• • •	•••		497
1902	144	15	137	34	1	3	3				* *, *		• • •		• * •	337
190 <b>3</b> 190 <b>4</b>	21	17	30	15	• • •	2	27	32		• • • •	· • •	•••	• • •			144
	34 29	35	89	20	• • •	5	2	•••	• • •	,	• • •	•••			•••	785
$\begin{array}{c} 1905 \\ 1906 \end{array}$	18	49	456	28	•••	5		• • •	•••	• • •	• • •	• • • •	•••		• • •	567
1907	$\frac{18}{22}$	$\begin{array}{c c} 17 \\ 14 \end{array}$	$\begin{array}{c} 50 \\ 26 \end{array}$	17	• • •	4		• • •		• • •	••	3 * * * * *	•••		· • • •	106
1907	14	14	$\frac{20}{22}$	$\frac{21}{23}$	•••		1	•••			• • •	••• ',			• • •	84 77
1909	11	7	149	15	•••	$\frac{4}{3}$	•••		11		• • •	•••	• • •		•••	196
1910	18	32	123	$\begin{vmatrix} 13 \\ 12 \end{vmatrix}$	•••	4	• • •	••	11	•••	• • •	• • • •	• • •		• • • •	194
1911	$\frac{10}{32}$	$\frac{32}{16}$	39	9	•••	2		••	5 3		• • •	•••	• • •	•••	• • • •	101
1912	19	31	9	3	• • •	$\frac{2}{2}$		• • •	53		• • •	•••	• • •	• • •		117
1913	26	15	28	$\begin{vmatrix} 3 \\ 2 \end{vmatrix}$	• • •	1			91	•••	• • •	•••	• • •	• • •	• • • •	163
1914	$\frac{1}{20}$	$\frac{13}{27}$	206	10	•••	1		• • •	88	4	• • •	•••	• • •	•••		356
1915	16	18	108	6	• • •	$\frac{1}{2}$	• • •	• • •	84	7	1	• • •	• • •		• • • •	292
1916	13	19	54	$\begin{bmatrix} 5 \\ 5 \end{bmatrix}$	• • •	1	•••	•••	69	5	1	215			•••	382
1917	5	11	55	5	• • •	1	•••	• • •	59	$egin{array}{c} oldsymbol{3} \ oldsymbol{2} \end{array}$		127	• • •		•••	265
1918	8	12	33	i	•••	$\overset{1}{2}$	•••	• • •	51	1	1	807	• • •	• • •	•••	916
1919	14	6	17	1	• • •	2	• • •	* * *	27	$\frac{1}{2}$		69	18	22	1	179
1920	18	9	37	$\frac{1}{2}$	•••	$\begin{bmatrix} \tilde{2} \end{bmatrix}$	•••		32	3	•••	126	10	5		245

**DIPHTHERIA AND CROUP.** Of these diseases 18 cases were notified, as compared with 14 the year before; in 11 of these 13 swabs were taken and sent to Manchester University for examination.

In 7 cases the reaction was positive, in 5 negative, and in 1 doubtful.

A supply of Anti-Diphtheretic Serum is kept at the Health Office, and during the year 30,000 units were issued to medical practitioners.

#### SCARLET FEVER.

Number	ΟÏ	houses	with	one	case	 31
	, ,	• •		two	cases	 3

The distribution was as follows:

		West	North	North	South	South
	Central	Central	East	West	East	West
Population	6329	3847	8793	7365	6678	6170
Number	5	2	12	3	10	5

Table showing susceptible period:—

Under 1 Year	1 to 5	5 to 15	15 to 25	25 to 65	Total
0	7	28	1	1	37

Fourteen of these cases were removed to Bull Hill Isolation Hospital. There were no return cases. The remainder were nursed at the homes, as they had sufficient accommodation for isolation.

**TYPHOID FEVER.** There were 2 cases notified during the year, as compared with one case in the previous year.

One of the patients was a nurse who had attended a person suffering from the disease in Carnforth. She was removed to an Isolation Hospital.

**OPHTHALMIA NEONATORUM.** Three cases were notified. The County Authorities were at once informed.

PUERPERAL FEVER. Three cases were notified, one proving fatal. All these cases were reported to the County Authority.

**ERYSIPELAS.** There were 9 cases, as compared with 6 in the previous year.

#### SMALL POX. None.

There were 10 cases of Pneumonia and 5 cases of Malaria notified, the latter being men who had been on military service abroad, where the disease was contracted.

**TUBERCULOSIS.** Under the regulations 32 cases were notified, as compared with 27 in the previous year. The following Table gives detailed particulars of them.

# Table showing Age Periods and Localisation of Tuberculosis Cases notified during 1920.

DISEASES.	Under 1 year	to 2	2 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 65	65 and upwards	Total.
	M F	MF	M F	M F	M F	MF	MF	M F	M F	M F
Bones, Lower Jaw Bowels Cervical Glands Glands of Neck Lungs Meninges Right Hip Joint Right Knee Joint Spine	1	1	1		1 1 4 2	1 4	2 2 1	6 1		1   1   1   1   1   1   1   1
	$\left  - \right _2$	1	-   1	 1	- -	$-\frac{ }{6}$	5	- -	• • •	32

Thirty-five deaths took place from Tuberculosis of one kind or another, being 6 more than in the previous year.

Pulmonary Tuberculosis headed the list with 23, Meningitis 5, other tuberculous diseases 7.

Twenty-two cases of Pulmonary Tuberculosis were sent to various sanatoria. Twenty of these were discharged before the end of the year, with the following results:—

In 1 case—No report.

,, 6 cases Improvement.

,, 5 ,, No change.

,, 2 ,, Worse.

,, 6 ,, Dead.

,, 0 ,, Fit for full work.

,, 7 ,, Not fit for work.

,, 6 ,, Fit for light work.

The Consumptive Patients from Darwen were sent to the following institutions:—

Elswick Sanatorium, Elswick.

Heath Charnock Sanatorium, nr. Chorley.

Burnley Sanatorium, Burnley.

High Carley Sanatorium, Ulverston.

Bull Hill Sanatorium, Darwen.

Luneside Sanatorium, Lancaster.
Meathop Sanatorium, Grange.
Aitken Sanatorium, Holcombe Brook.
Shelf Sanatorium, Halifax.

During the year 69 patients were sent by the County Committee to Bull Hill Sanatorium.

# Table showing the number of Pathological Specimens which have been sent for examination to Professor Belépine, Public Health Laboratory, Victoria University, Manchester.

YEAR.		D <b>i</b> ph	theri	a.	Typhoid Fever.				Tuberculosis Sputum.			Cerebro-Spinal Fever.  Spinal fluid Swabs.					
	Posi- tive.	Nega- tive.	Doubt ful.	Total	Posi- tive.	Nega- tive.	Doubt ful.	Total	Posi- tive.	Nega- tive.	Total	Fosi- tive.	Nega- tive.	Total	Posi- tive.	Nega- tive.	Total
1911	6	8	•••	14	4	3		11	2	9	11			• • •			• • •
1912	7	4		11		7		***	7	11	18			***			•••
1913	. 8	8	•••	16	1	,		8	28	33	61						
1914	4	9	1	14	6	7		8	65	57	122						
1915		12		12	2	2	• • •	6	58	60	118	1		1		2	2
1916	6	7		13	1	4	1	6	74	50	124		1	1		3	3
1917	8	16	1	25	1	8		9	56	64	120						
1918	4	4	1	9	2	]	• • •	3	42	76	118					•••	
1919	7	8	1	16		•••			34	59	93			• • •			
1920	8	11	1	20	2		1 • •	2	38	48	86		•••	• • •			

#### ZYMOTIC DEATH RATE.

1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905
3.0	1.9	2.0	1.2	1.7	1.9	2.2	1.1	2.1	2.2	1.6	2.08	2.34	2.90	2.14	1.03	0.76	2.07	1.00
1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920				
1.14	0.69	0.76	1.10	0,51	1.51	0.86	0.27	0.44	1.42	0.54	0.32	0.42	0.19	0.12				

Notification of Infectious Diseases in each Ward, and for each Month of the Year 1920.

Application		.lstc T	25	27	46	45	19	15	∞		4	H 7	24	00	106
Consumption		Typhoid Fever.	:	:	:	:	:	:				•		6.1	1
Consumption		Erysipelas.	1 7	Ç1	C.J	C.J.	:	:				•		,	9
Consumption		Ophthalmia Neon		:	:	:	:						1	:	
Consumption			1 50	7	:	,—	-	<del></del> !	<del>y</del> -				1 4	63	18
Consumption	) D	Puerperal Fever.	1 7			:								:	60
Consumption	2	Scarlet Fever.	7	:	<b>CJ</b>	C.1								•	37
Consumption	OF	Meas, & G. Meas.	12	21	31	31	11	70	ಛ	60	67	. –	4	CJ	26
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Consumption			1 87	<u> </u>		ಣ	<del></del>	<u>~</u>	<del>_</del>	67		- 21	<u>C7</u>	<del>-</del>	31
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Consumption	TE		1 67	:	:	:	:	<del></del> :	:	:	•			•	60
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Consumption	SS \		1 :	:	:	-	:	:	:	•		•	<del>:</del>	:	1 +3
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Consumption				:		<u>-</u>			<u>:</u>	:	:		:	: 1	7
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Consumption   Consumption   Carlet Fever.   Scarlet Fever.   Scarlet Fever.   Scarlet Fever.   Carlet Fever.	N Z	Typhoid Fever.		:	:	:	:	:	:	:	:	:	:	-	
CEN   Consumption   CEN   CE	5	Consumption		:	r-1	:	:	:	:	:	:	-	-		7
Consumption		Scarlet Fever.						:	:	:	:	:	61		2
	1	Puerneral Fever.		:	:	•	:					STATE OF THE PARTY			67
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	L		:	•	10	13	70	C.1		:	:	:	H	:	27
	E			:	_ :	:		:	:	:	:	:	H		
MONTHS.  JANUARY  MARCH  MAY  JUNE  TULY  AUGUST  NOVEMBER  OCTOBER  NOVEMBER  TOTALS  TOTALS	C	Consumption			67	:	ಣ	:	:	:	$\dashv$	:	:		1
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# RETURN OF VACCINATION FOR DARWEN, 1920.

-	MONTHS.	Successful Vaccination.	Died Unvac- cinated.	Insus- ceptible.	Ex- empted.	Post-poned.	Re- moved out of Town and Traced	Re- moved and Cannot Trace.	Unac- counted for.	Successfully vaccinated each quarter.
	January	26	9	0	64	1	0	0	0	
	February		9	Ö	33	$\overline{0}$	ŏ	0	o o	
	March		11	i	45	1	ŏ	0	Ö	64
	April		6	$\bar{0}$	33	1	0	0		* a
	May	27	9	0	50	0	0	0	$\frac{0}{1}$	
	June		1	0	44	0	0	0	1	70
1	July		4	0	48	1	0	0	1	
	August		$\begin{vmatrix} 4\\3 \end{vmatrix}$	0	46	0	1	0	4	
	September	15	$\frac{2}{1}$	0	44	0	0	0	$egin{array}{c} 4 \ 2 \end{array}$	52
	October		1	0	43	0	0	0	16	
	November		2	0	17	0	0	0	25	
	December	0	1	0	9	0	0	0	51	9
		195	52	1	476	4	1	О	101	195

#### VACCINATION.

Year	Births	Successfully Vaccinated	Rate per cent. Vaccinated
1900	980	705	71.9
1901	858	651	75.9
1902	891	765	85.9
1903	941	750	79.7
1904	820	662	80 7
1905	818	618	75.6
1906	811	593	73.1
1907	876	597	68.2
1908	895	447	49.9
1909	816	294	36.0
1910	776	275	35.4
1	754	280	37.1
1911			29 57
1912	690	204	
1913	738	232	31.44
1914	765	271	35.42
1915	666	209	31.38
1916	562	200	35.58
1917	427	153	34.43
1918	353	116	32.86
1919	495	134	27,07
1920	845	195	23.07

When a case of infection is notified attending a Public Elementary School this is at once visited by the School Nurse and myself. The children are all examined and any suspects are sent home. In the case of Diphtheria swabs are taken and sent to Professor Delépine for examination. Close watch is kept to check any spread.

Cases of Measles and Mumps are reported sometimes by teachers and are at once examined by me.

#### DISINFECTION.

During the year infected bedding was removed from 86 houses for disinfection, and 96 rooms were fumigated.

LIST OF BEDDING DISINFECTED DURING 1920.

Beds	Mattresses	Bolsters	Pillows	Quilts	Blankets	Sheets	Suits of Clothes	Carpets	Rugs	Curtains	Cushions	Shawls	Sundries
114	19	71	122	59	72	31	2	1	1 4	0	3	8	168



## Maternity and Child Welfare.

The following is Mrs. Shawcross's (Health Visitor) Report:—

## HEALTH VISITOR'S OFFICE, .

43, BOLTON ROAD, DARWEN.

Dr. F. G. Haworth, Medical Officer of Health.

Sir,—			
The following is a brief report of my work as Health year 1920—	n Visit	or dur	ing the
Notifications of Births received			880
First visits paid			09
Second and subsequent visits			54
Visits paid to children over 1 year and under 5 year			17
,, ,, suffering from Ophthalmia Neo	natoru	m	26
,, ,, expectant mothers		1	62
Total	• • • • • • •	$\dots$ $\overline{21}$	68
The following statistics were obtained on first visit		*****	SALAH SA
Feeding.	1920.		1919.
Breast	360		221
Bottle	196		109
Breast and Bottle	153		112
to the state of th	709		442
Types of Bottles used.	1920.		1919.
Bottles without tubes	193		127
,, with glass tubes	82		41
,, ,, rubber tubes	74	• • • • •	53
	349		221
Foods.	$\frac{1}{1920}$		1919.
Cow's Milk	84		45
,, ,, and Water	44		51
,, ,, and Barley Water	46		35
,, ,, Citrated	14.		5
Nestle's Milk	40		24
Glaxo and other dried milks	82		37
Prepared food	39	• • • • • •	24
	349	• • • • •	221

Maternity and Child Welfare Centres.—			
Number of Names on Register.	1920.		1919
School Street Branch	740		460
· Hanover Street Branch	71		37
	811		497
		and global account of the graph and the state of the graph and the state of the graph and the state of the graph and the graph a	1919.
Babies specially examined by Medical Officer of Health	441		352
Babies referred to family medical man			97
School Street Branch		10	
Hanover Street Branch		2	
		$\overline{12}$	
Average weekly attendance of Mothers.	1920.	geographic Anni Angli	1919.
School Street	95		75
Hanover Street	20		11
	115		86
Average weekly attendance of Children.	1920.		1919.
School Street	105		85
Hanover Street	22		11
	$\phantom{00000000000000000000000000000000000$		96
Number of Babies weighed at Health Visitor's Office	1920		. 63

On December 18th, the Mayoress (Mrs. Duxbury) provided tea, and afterwards an entertainment, in the Lecture Hall, Free Library, for all mothers and babies attending the Centres and Day Nursery.

I am, Sir,

Yours obediently,

H. H. SHAWCROSS,

Health Visitor.

## NOTIFICATION OF BIRTHS ACTS.

## Table showing the number of Births Notified during 1920.

	Male.	Female.	Total.	Stillborn:
JANUAŖY	52	40	92	. 6
FEBRUARY	27	43	70	7
MARCH	42	30	72	4
APRIL	34	46	80	7
MAY	48	3/7	85	7
JUNE	42	29	71	4
JULY	37	42	79	4
AUGUST	37	39	76	5
SEPTEMBER:	39	36	75	5
OCTOBER	31	26	57	0
NOVEMBER	25	34	59	7
DECEMBER	34	30	64	2
	448	432	880	58
,, ,, Midwives and M Parents and M ,, M	Medical edical M idwives	Men		$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Total  All Births were notified with				
Births visited after rece Births re-visited ,, Visits to expectant mot	eipt of N	otifications	70	)9 54

## Table showing Births Notified, Visits, etc.

		Births N	Notified.			ified.		rths ited.	
Year.	Males,	Females	Total.	Still- born.	No.	Prose- cutions.	No.	of Total	Births Revisited
1912	373	336	709	45	10	0	$\frac{-465}{}$	65.6	587
1913	407	366	773	46	12	0	351	45.4	560
1914	390	404	794	41	9	0	428	54.2	537
1915	343	338	681	33	12	0	432	63.4	576
1916	272	292	564	27	9	0	421	78.2	596
1917	224	204	428	20	8	. 0	397	92.8	1370
1918	180	168	348	19	11	0	320	91.9	1477
1919	266	273	539	34	3	0	442	82.0	1294
1920	448	432	880	58	6	0	709	80.5	1054

## DEATHS UNDER ONE YEAR OF ACE.

Year	Premature Birth	Convulsions	Bronchitis & Pneumonia	Diarrhœal Diseases	Whooping Cough	Measles	Inanition	Congential   Defects	Other Causes	Total	Rate per 1,000 Births.
1892	15	36	37	5	11		13		60	177	167
1893	$\frac{24}{24}$	22	49	16	2	9	12		50	184	193
1894	$\overline{21}$	$\overline{17}$	30	6	10	•••	8		38	130	125
1895	16	17	33	41	3	13	27	6	36	179	158
1896	25	14	44	35	15	3	18	6	30	187	181
1897	27	11	39	35	4	13	22	8	36	182	163
1898	33	6	33	58	•••	11	12	9.	48	199	175
1899	22	18	4.1	43	7	1	9	12	48	200	188
1900	36	16	38	27	4	9	18	5	44	188	191
1901	20	8	35	24	6	3	15	7	30	145	169
1902	23	6	35	16	6 7	1	7	7	35	135	151
1903	21	2 2 5 5	25	16		2	17	4 5	5	117	124
1904	15	2	21	29	13	8	13	0	25	123	150
1905	31	5	27	11	•••	1 4	17	3	24	118	144
1906	18		27	19	1	4	9 7	3	$\begin{array}{ c c }\hline 30\\17\\ \end{array}$	104	136
$   \begin{array}{c c}     1907 \\     1908   \end{array} $	18	9 3	34	11 26	4	•••	10	4 4	24	104	120
1908	$\begin{array}{ c c }\hline 27\\ 21\\ \end{array}$	1	34	10	8	7	6	5	12	104	127
1910	$\begin{vmatrix} 21\\19 \end{vmatrix}$	11	17	12	3	′	5		25	95	122
1911	22	2	14	23		9	18	3	27	116	153
1912	13	4	20	6	10	3	9	4.	19	88	127
1913	17	l î	20	12	1	2	18	6	17	94	127
1914	16	6	$\frac{1}{21}$	10	2		14	5	17	91	119
1915	14	3	18	7	6	4	5	1	17	75	112
1916	13	2	9	2	2	1	4	3	15	51	91
1917	9	1	14	5	1	•••	4	•••	16	40	. 89
1918	3		4	2	•••	3	1	1	12	26	74
1919	15	2	11	1	1		8	8	11	57	115
1920	18	1	12	1	•••	1 .	15	3	29	79	93

## Table showing Infantile Mortality in the Various Wards.

Year.	C.	W.C.	N.E.	N.W.	S.E.	S.W.	Boro.'
1912	82	155	110	102	165	128	127
1913	105	162	135.	145	157	90	127
1914	98	128	122	123	170	99	119
1915	127	151	128	94	57	112	112
1916	109	25	140	107	59	55	91
1917	164	77	76	79	59	104	89
1918	38	57	95	63	133	34	74
1919	154	42	108	185	73	131	115
Average for 8 yrs.	109	99	114	112	109	94	107
1920	84	111	114	77	98	68	93

We have one Health Visitor (Nurse Shawcross), whose report of the work done is included. There are two Welfare Centres, one at the Lecture Hall, Free Library, held every Wednesday afternoon, the average attendance is probably from eighty to one hundred. Every child is weighed, and in the event of any loss of weight I am in attendance to give advice on the probable cause and the treatment.

A Ladies' Voluntary Committee has been appointed, of which a certain number attend each week by rota, make tea and supply it with cakes to the mothers. Frequent committee meetings are held to discuss the business.

A second Welfare Centre is held in the Day Nursery, Hanover Street, on the Tuesday afternoon, where the average attendance is from twenty to thirty. The babies are weighed, and I also attend to give advice. As both these Centres are unsuitable on account of the want of accommodation for weighing and consultations, we are on the look-out for better premises.

The number on the books at School Street is 740, and Hanover Street 71, total 811, which is an indication that the work is appreciated, and since Mrs. Shawcross was appointed the numbers have increased. Sixty-three children are also taken to the School Clinic to be weighed, and as many as possible are seen by me in case advice is needed.

A children's hospital has not been opened. Many expectant mothers attend for advice, and some are supplied with Glaxo to secure a supply of breast milk. This is the main purpose, and everything is done for this purpose. There is an inclination with some medical men to give up the breast feeding, or on too slight an excuse, we try to counteract this inclination.

During the winter there has been much distress and in consequence we have supplied free milk. Before this is done full enquiries are made into the family income. Milk is not allowed if this reached 10s. per head per week except in certain exceptional cases. When cases of Puerperal Fever and Ophthalmia Neonatorum are notified the County Authorities are communicated with and they take action.

The Council has made arrangements with the local Nursing Association to undertake the nursing of cases of Measles.

#### COUNTY OF LANCASTER.

#### SUMMARY OF

## Medical Officer's Report for 1920.

#### URBAN DISTRICT OF DARWEN.

Medical Officer of Health—FREDERIC GEORGE HAWORTH. Salary as M.O.H.—£250; Bonus—Nil.

Is he a whole-time Officer?—Yes.

Inspectors of Nuisances—William E. Marsden and C. R. Walsh. Salary—W. E. Marsden, £160; C. R. Walsh, £150. Bonus—W. E. Marsden, £109 12s.; C. R. Walsh, £132.

Are they whole-time Officers?—Yes.

What is the character of the Hospital Accommodation?—For Small-pox: Farm House, 2 Beds. For other Infectious Diseases: For Scarlet Fever and Typhoid Fever, 1 Block, 20 Beds, good; 1 Block, 8 Beds, very good.

Is it Joint or otherwise?—Our own.

No. of Beds available—For Small-pox, 2. For other Infectious Diseases, 28.

#### DISINFECTION.

No. of Houses disinfected?—96. Method?—Sulphur and Formalin. Are Houses disinfected after Phthisis?—Yes. Measles?—Occasionally. Apparatus used for Clothing, Bedding, etc. (steam or otherwise)?—Washington Lyons Superheated Steam Disinfector. No. of Articles disinfected?—671. Where is Apparatus situated?—Bull Hill Hospital. If Apparatus at Hospital is available, is it used for the disinfection of Clothing, Bedding, etc., of Patients not removed to the Hospital?—Yes.

Are any Diseases notifiable other than those which are compulsorily notifiable (for instance Measles, Whooping Cough, Diarrhæa, Chicken Pox, etc.)

—Yes. If so, what are they?—Measles.

Diseases specially prevalent?—Measles. Period?—February, March, April.

No. of times School Closure adopted for Scarlet Fever?—None. Diphtheria?
—None. Measles?—None. Whooping Cough?—None. Chicken-pox?
—None. Influenza?—None. Any other Diseases?—None.

- No. of Special Reports made under Art. XIX. (15 and 16) Sanitary Officers' Order, 1910?—None.
- Bacteriological Examinations. Specimens examined: Blood, 4; Throat Swabs, 20; Sputum, 86; others, 2.
- Diphtheria Anti-Toxin Order, 1910. Is a supply of Anti-toxin kept within the district?—Yes. Where?—Health Office. Amount used during 1920?—30,000 units.

### "THE HOUSING ACTS, 1890 to 1919."

- Has your Authority determined the procedure to be adopted for the inspection of your District as required by Article I. of the Regulations of 2nd September, 1910?—Yes.
- Has your Authority prepared, as required by Article I. (3) a list of dwelling-houses, the "early inspection of which is, in the opinion of the M.O.H., desirable"?—Yes.
- Has your Authority designated an officer to undertake the special inspection of houses and to keep the records stipulated by Articles (II.) and (III.). If so, what officer?—Inspectors of Nuisances.
- Have the necessary books, forms, etc., for keeping the required records been obtained?—Yes. Are these kept up-to-date?—Yes.
- Action taken in 1920 under the Housing Acts:—
  - (a) No. of Dwelling-houses specially inspected during 1920 under Sec. 17 of the Act of 1909, with a view to ascertaining whether any dwelling-houses are unfit for human habitation?—154.
    - Have the particulars of these inspections, as specified in Article II. (1) to (8), and Article III. (1) to (8) of the Housing (Inspection of District) Regulations, 1910, been fully recorded?—Yes.
    - No. of Dwelling-houses considered unfit for human habitation?—52.
    - No. of Representations to Authority with a view to making Closing Orders?—52
    - No. of Closing Orders made?—0.
    - No. of Dwelling-houses in which defects were remedied without making Closing Orders?—4.
    - No. of Dwelling-houses put into a fit state of habitation after making Closing Orders?—0.

No. of Dwelling-houses demolished?—2.

General character of defects found to exist?—Want of ventilation, want of air space, no through ventilation. Drainage bad and cannot be remedied owing to surroundings.

Total number of Dwelling-houses inspected for purposes of the Housing Acts (other than those inspected under (a) above)?—3.

If your Authority has a Housing Scheme, state what stage had been reached on December 31st, 1920, giving information under the following headings:—

No. of	No. of 1	Lay-outs.	No. of included in I	Houses Touse Plans.	No. of Houses				
Schemes Submitted.	Submitted.	Approved.	Submitted.	Approved.	On which Work has commenced.	Completed.			
2	2	2	242	242	Nil.	Nil.			

No. of houses built during 1920 by private enterprise?—None.

#### SOURCE OF WATER SUPPLY.

What is its condition?—Upland surface, good.

Possibilities of contamination?—Not in vicinity of dwelling-houses.

Any insufficiency, and where?—None.

Nature of extensions (if any) during the year?—None.

#### SCAVENGING AND REMOVAL OF HOUSE REFUSE.

Are Scavenging and Removal of House Refuse carried out satisfactorily for whole of district?—Yes.

How performed (state whether by Sanitary Authority, Contract, or Occupiers of Houses)?—Sanitary Authority.

If Privy Middens exist, are they emptied by day or night?—None.

How is the Refuse disposed of?—Burnt in Destructor.

Has a Destructor been provided?—Yes, Meldrum's.

If so, where?—Shorey Bank, near Electricity Works.

#### SEWAGE DISPOSAL WORKS.

Method of Treatment?—Bacteriological.

What is the character of the Drainage System? Any developments during year?—Combined System.

Areas, or Townships, without proper drainage system?—None.

Action taken—Drain Testing, Flushing, etc?—Water, Smoke, Periodic Flushing.

Action taken with regard to the Pollution of Streams?—No legal action.

Canal Boats. Number Inspected?—None.

What is the condition of the Bakehouses?—Fairly Good. No.?—90.

What is the condition of Slaughter-houses?—Fairly good. No.?—3. No Registered?—2. No. Licensed?—1.

Has a Public Abbattoir been provided?—Yes.

What is the condition of Lodging Houses?—One only—Municipal.

What is the Sanitary condition of the Schools?—Good.

### DAIRIES, COWSHEDS AND MILKSHOPS.

Are they periodically inspected?—Yes.

What is their condition?—Fairly good.

Have Regulations been made under the Order of the L.G.B.?—Yes.

Are they enforced?—Yes.

Amount of air space in cubic feet required for each cow?—(a) Where cows are habitually grazed?—600 cubic feet. (b) Where cows are not habitually grazed?—600 cubic feet.

Total No. of Cowkeepers?—103. No. on Register?—103.

No. of Inspections during year?—207.

Total No. of Dairymen or Milk Purveyors (other than Cowkeepers)?—4. No. on Register?—4.

Any arrangements for veterinary inspection of dairy cows?—Veterinary Surgeon called in if occasion requires.

Action taken (if any) as to tuberculous milk?—None.

#### INSPECTION OF FOOD.

Amount condemned or surrendered as unfit for human consumption:

- (a) Tuberculous carcases and parts?—25. Total weight 2,148lbs.
- (b) Diseases, unsound, or unwholesome meat (other than above)?—
  Total weight, 4,403lbs.
- (c) Other foodstuffs?—20stns. Fish; 160lbs. Pears; 18 Tins Condensed Milk; 15lbs. Butter; 10 Bags Tripe.
- No. of Legal Proceedings, and result?—Slaughtering Pig in unregistered Slaughter-house. Fined 10s.

## DEPARTMENT OF INSPECTORS OF NUISANCES.

No of Notices served?—Informal,736; Statutory, 389.

No. of Nuisances abated?—786.

No. of Legal Proceedings taken, and result?—None.

#### CLOSETS AND ASHPITS.

Privy Middens. No. of Middens?—None.

No. of Closets attached to these Middens?—None.

No. of Pail Closets?—1,729.

No. of Dry Ashpits (excluding Middens)?—12.

No. of Fresh Water Closets?—6,458.

No. of Portable Receptacles for Refuse?—10,450.

No. of Waste Water Closets?—2,471.

No. of Privy Closets converted during 1920?—To Fresh W.C.'s, none; To Waste W.C.'s, none; To Pails, etc., none.

No. of Pail Closets converted to Fresh W.C.'s, 30; Waste W.C.'s, none.

No. of Waste W.C.'s converted to Fresh W.C.'s?—4.

Does Council contribute towards the cost of conversion?—Yes.

How much?—Half cost of conversion of Pails to W.C.'s (Fresh).

What kind of closet accommodation is being provided for new property?—Fresh Water Closets.

#### SMOKF.

- No. of Observation?—116.
- No. of Legal Proceedings taken, and result?—One—Order to Abate.
- What is the time limit allowed for the emission of black smoke per hour?—
  One, two, or three boilers, 5 minutes per hour; four or more boilers,
  7 minutes per hour.
- Has the Authority adopted :—
  - "The Infectious Disease (Prevention) Act, 1890"?—Yes, except 5-11 inclusive and section 15.
  - "The Public Health Acts Amendment Act, 1890"?—Yes, except that relating to music and dancing.
  - "The Public Health Acts Amendment Act, 1907"?—Certain sections.

    Also Darwen Corporation (1887 and 1898) Acts.
- Has a Health Visitor been appointed by the Local Council? State whether whole or part-time?—Yes, whole-time.
- Qualifications of Health Visitor?—C.M.B. and Fever Training.
- Has any, and if so what, action been taken by the Council respecting Child Welfare Work?—Two Maternity and Child Welfare Centres established and held weekly. Day Nursery. Milk granted to necessitous cases.
- Has any scheme been prepared in regard to the Supply of Food and Milk for Expectant and Nursing Mothers, and of Milk for Infants?—Yes, grants were made in 159 cases, amounting to approximately £460.
- Is there a District Nursing Association in the District?—Yes.
- How many District Nurses employed?— About 6 Nurses.
- Does any arrangement exist between the Council and the Association in respect of Child Welfare Work?—No.
- Does the Association voluntary undertake Child Welfare Work?—No.
- Does the Association undertake (a) Midwifery cases?—Yes; (b) Monthly Nursing?—No.
- Notable Sanitary Improvements during 1920?—None.
- Chief Sanitary requirements of Distrct?—Completion of Conversion of Pails to Water Carriage System.

Signed,

F. G. HAWORTH,

Medical Officer of Health.

May 12th, 1921.

# ANNUAL REPORT OF THE MEDICAL OFFICER OF HEALTH FOR THE YEAR 1920 FOR THE BOROUGH OF DARWEN,

On the Administration of the Factory and Workshop Act, 1901, in connection with:—

## FACTORIES, WORKSHOPS, WORKPLACES AND HOMEWORK.

#### I.—INSPECTION.

Including Inspections made by Sanitary Inspectors of Muisances.

		Nun	nber of
Premises.		Written	Prosecu-
Ir	nspections.	Notices.	tions.
Factories (including Factory Laundries)	270	15	
Workshops (including Workshop Laundries)	315	12	• • •
Workplaces (other than Outworkers' pre-			
mises included in Part 3 of this Report)	49	2	
Total		29	,

#### II.—DEFECTS FOUND.

Nuisances under the Public Health A	Acts:-		Referred to					
			Referred to H.M.	No. of				
	Found.	Remedied.		Prosecutions.				
Want of cleanliness	$5^{-}$	5	. 3 -					
Want of ventilation	1	1		• • •				
Overcrowding			• • •	• • •				
Want of drainage of floors	1	1		• • •				
Other nuisances	14	14						
Sanitary accommodation—								
Insufficient	3	3	3					
Unsuitable or defective	5	5						
Not separate for sexes	1	1	• • •					
Offences under the Factory and Wo	rkshop	Acts:—	,					
Illegal occupation of under-								
	• • •		* * 2	• • •				
Breach of special sanitary re-								
quirements for bakehouses (ss. 97 to 100)	8	8						
Other offences (excluding of-		,	• • •	* • •				
fences relating to outwork								
which are included in Part 3			;					
of this Report)	4	4	* * *					
Total	42	42	6	• • •				

## III.—HOME WORK.

Outworkers' Lists, Section 107.

	Lists	received from Employ ading twice in the year	ers.
Nature of Work.	561	Outworkers.	
	Lists.	Contractors. Wor	
Wearing Apparel—Making, etc	4		6
Household Linen	2		6
Total	6	1	2
IV.—REGISTER  Textile Factories Non-Textile Factories Factory Workshops Workshops Workplaces	• • • • • • • • • • • • • • • • • • • •		. 48 . 147 . 221
Total number of Workshops	s on Re	gister	. 495
V.—OTHE	CR MAT	TTERS.	
Matters notified to H.M. Inspector of Failure to affix Abstract of the			Number.
(s. 133, 1901)	d by H. ealth Acts (s. 5)	M. Inspector as reme- ets, but not under the , 1901)—	-
Notified by H.M. Inspe	ector		. 16
Reports (of action take	/	1	
Other			

# MEAN METEOROLOGICAL READINGS FOR 1919 AND 1920.

				Ther	mometers					1												
		- 1	.			Earth.				1						W	ind I	)irec	tion,	1920.		
	Barometer		Mini-	-	Foot. 4	Feet.	10 Feet.	Water.	Hu- midity	1	Sunshine (hours).	Ra (m.	in .m.)	Win								_  -
		mum. r	num.	Ican. 1	019 1920 15	919 1920	1919 1920	1919 1920	1919 192	20 1	919   1920	1919	1920	1919	920	N. N.E	E.	S.E.	s. s.		W. N.	11-
MONTH.	1919   1920 ins.   ins.	1919 1920 19	191920 19	191920	9131320		457 43	7 39 4 41.1	94 85	5	20.5 24.	7 169.1	140.9	10	14	0 4	0	5				3
anuary	29.730 29.818	43.6 3 45.8 2	1.3 36 3	39.9	37.5 37.9	39.3 40.	5 43.8 42	7 39.4 41.1 9 37.8 42.3	94 8	9	55.8 49.	1	113.3		15	3 3	0	1	22	- 1		7
ebruary	29.835 30.14		0	140 2	36 7 42.2	39.1 41.	5 42.0 44	.5 35.1 20.0	1	- 11	89.0 67.		148.1	1 1	14	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	4	6	15		11	9
darch	(1	1 1 0 -	0 40 00	1 49 811	41.9 45.0	40.0 40	. 111 2210	11	11		03.6 62. 92.3 145		204.3	11 1	11	0 0	7	6	9		-	3
April May	11	1 0	1 1 40 1 1	55 Ol 19 81	50.41 01.01	40.0, 41	.11 201-	11		- 11	65.8 164	7 65.7	7 90.4	11	9	0 8	13	9	7		23	5
June	30.111 30 02	63.7 63.7	46.7 46.2	55.2 54.9	55.1 57.5	50 7 59	3 9 48.5 4	9.6 52.9 51.	9 84 8	88	142.0 93	4	1 179.0	11	11	2 2	0	2	15	10	41	5
July	30.065 29.80	65.0 60.9	47.4 48.4	57.8 54.9	58.4 57.2	55.3 5	4 5 50.4 5	1.1 53.7 51.	.7 85	82	132.9 .89	1		1	10	0 0		7	18	6	23	2
August	30,000 30.0	10 60.9 60.2	45.2 47.2	53.0 53.7	54.2 54.9	54.2 5	3.7 51.6 5	1.6 50.9 50	.7 88	87	108.5 102	5.7   78.			11	0 :	3 13	21	21	4	0	0
September	30.207 29.9	80 51.5 55.8	38.2 45.0	44.8 50.4	36.4 50.0	49.7 5	1.3 51.0	1.4 46.2 48	5.1 89	83	24.1 3	7.8 104.	8 68.	6 11	13	0	7 2	5		17	8	0
October November	29.789 30.0	38 40.6 48.6	31.4 40.6	36.0 43.6	39.2 43.5	44.5 4	12.9 45.6	14.1 41.9 42	2.1 89	84		9.4 242.	-	_	13		5 12		17	-	230	40
December	29.789 30.0 29.742 29.9	993 44.1 42.1	34.4 34.3	39.2 00.		-  -		46.8 46.0 4		1	1175.5 96		7.2 1424			13 3	8 98	- 80	100	-		



# METEOROLOGY.

The Meteorological Observatory is at Bold Venture Park in Lat. 53° 41′ 25″ N., and Lon. 2° 28′ 32″ W., and is at an altitude of 728 feet above mean sea level.

Observations are taken twice daily, at 9 a.m. and 9 p.m.

This station is connected with the Meteorological Office, and is called a Normal Climatological Station. A report, giving all details of readings, is sent each month to the Meteorological Office, London.

The total rainfall for the year is 1424.4 millimetres, or 56.06 inches being recorded on 231 days; the average for the last fourteen years being 54.88 inches. The greatest monthly fall was in May, 204.3 millimetres; and the lowest in October, 43.7 millimetres. The greatest daily fall was 43.5 millimetres, on August 4th.

The total sunshine registered on 270 days during the year was 961.0 hours, being below the average for the last 14 years, which is 1133.1 hours. June registered the highest monthly total, 164.7 hours; and December the lowest, 19.4 hours. The highest daily reading was 13.7 hours, on June 9th.

The mean minimum temperature in shade was 41.5°, being above the average for the last fourteen years, which was 40.4°. The lowest monthly mean was in December, 34.3°, and the lowest reading for the year 16.7°, on December 13th.

The maximum wind velocity was on December 3rd, when a south-westerly wind was blowing at the rate of 60 miles per hour.

No observations of calm were recorded, 13 observations of fog, 23 observations of snow, and 19 observations of hail, 8 observations of thunder, 3 observations of lightning, thunderstorm on 4 days, 53 observations of dew, gale on 1 day, 19 observations of hoar frost, 57 observations of mist, rainbow on 5 days, glazed frost on 1 day.

## Housing.

- I. The general housing conditions of the district are good. I have expressed an opinion to the Council that at least 200 are needed. To meet this, several schemes have been submitted.
- II. I have not met with any cases of overcrowding, at least, not more than one has been reported to me, and that was in the course of inspection for dirty premises. But I have no doubt there are cases of overcrowding even in the better houses, where some member of a family has married, children being born, and they have to live with their parents. To what extent this applies I cannot say. During the year a larger number of people were married than has previously taken place, viz., 534; and they will need homes to live in, yet during the war there were no new houses put up, and this leeway will have to be made good. 4,803 inspections were made by the Inspectors. The major part of work done has been under the Public Health Act. By informal notices, 521 defects were found and remedied, and when legal notices have been served the work has been done without further proceedings. Many of these houses will not improve, but gradually become worse year by year, so that the time will come when many will have to be Some back-to-back houses have been previously closed and then made into through dwellings, but owing to a shortage of houses, such as were not too bad have been left for future action.
- III. The general standard of houses in the district is good, usually with only two bedrooms. This is not enough, because when children are born the time soon arrives when they should be separated into the sexes. The most common defect is want of cleanliness in the house on the part of tenants. Children are allowed to kick the walls, paper is torn off, and the house acquires a dilapidated appearance.

I think landlords might keep a stricter supervision over property, especially inside and in the back yard, where evidence of neglect is probably exhibited first.

During the war much work was held up, which is now being done by

IV. A scheme dealing with a block of property known as Greggs Gardens and Shorrock Fold district was adopted after a thorough inspection and a representation to the Council that it was an unhealthy area, and was sent on to the Commissioner.

# HOUSING CONDITIONS (STATISTICS), YEAR ENDING DECEMBER 31st, 1920.

## I.—GENERAL.

1.	Estimated Population	39,182
2.	General Death-rate	13.01
3.	Death-rate from Tuberculosis	0.89
4.	Infantile Mortality	93
5.	Number of dwelling-houses of all classes	10,485
6.	Number of working-class dwelling-houses	9,439
7.	Number of new working-class houses erected	
	II.—UNFIT DWELLING HOUSES.	
	(i.) Inspection.	
1.	Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	4,803
2.	Number of dwelling-houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910	146
3.	Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for habitation	52
4.	Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for habitation	3
	(ii.) Remedy of Defects without Service of Formal Notice.	9
Nu	imber of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers	521
	(iii.) Action under Statutory Powers.	
(A	)—Proceedings under Section 28 of the Housing, Town Planning Act, 1919—	, etc.,
1.	Number of dwelling-houses in respect of which notices were served requiring repairs	0
2.	Number of dwelling houses which were rendered fit	
	(a) By owners	0
	(b) By Local Authority in default of owners	0
3.	Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of	
	intention to close	0

(B)—Proceedings under Public Health Acts—
1. Number of dwelling-houses in respect of which notices were served requiring defects to be remedied
2. Number of dwelling-houses in which defects were remedied  (a) By owners
(C)—Proceedings under Sections 17 and 18 of the Housing, Town Planning, etc., Acts, 1909—
1. Number of representations made with a view to making Closing Orders
2. Number of dwelling-houses in respect of which Closing Orders were made
3. Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit 0
4. Number of dwelling-houses in respect of which Demolition Orders were made
5. Number of dwelling-houses demolished in pursuance of Demolition Orders
III.—UNHEALTHY AREAS.
Areas represented to the Local Authority with a view to Improvement Schemes (a) Part I., or (b) Part II., of the Act of 1890 :—
1. Name of AreaPart 12. Acreage0.759 Acres3. Number of working-class houses in area524. Number of working-class persons to be displaced124
IV.
Number of houses not complying with the building bye-laws erected with consent of Local Authority under Section 25 of the Housing, Town Planning, etc., Act, 1919
V.
Staff engaged on housing work, with briefly the duties of each Officer:— One Architectural Assistant under Borough Engineer and Surveyor. The two District Sanitary Inspectors are also Inspectors appointed under the above Acts.



# REPORT

OF THE

## INSPECTORS OF NUISANCES

FOR THE

Year ending 31st December, 1920.



# PUBLIC HEALTH OFFICE, DARWEN,

MARCH 31st, 1921.

### TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.

GENTLEMEN,

I beg to submit my Annual Report of the work carried out by me in the Health Department during the year ending December 31st, 1920.

The District to which the Report refers comprises the Central, South-East, and South-West Wards of the Borough as follows:—

	Area	No. of	Estimated
	in Acres.	Houses.	Population.
CENTRAL WARD	. 110	1671	6329
SOUTH-EAST WARD	1900	1716	6678
SOUTH-WEST WARD	. 1980	1620	6170

### INFECTIOUS DISEASES.

The total number of notifications received during 1920 was 74, as compared with 91 in 1919.

The following Table gives a list of cases notified in each of the Wards in 1919 and 1920:—

WARD		Fever	Tvphoid	Fever		Díphtheria		Erysipelas	Puerperal	Fever	Con-	sumption		Measles		Malaria j	·	Freumonia	17.1.1	Opuenama
	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919
Central	5	1	0	0	3	0	0	0	1	1	7	4,	14	3	0	2	0	3	0	0
South-East	9	6	1	1	3	8	3	3	0	0	4	4	9	26	0	1	3	4	0	0
South-West	5	5	0	0	2	2	1	1	0	0	2	4	1	5	0	2	1	2	()	1
	19	12	1	1	8	10	4	4	1	1.	13	12	24	34	0	5	4	9	0	1

On receipt of a notification a visit is at once paid to the premises, advice given as to best means of isolation, and subsequent visits are paid to see that isolation, etc., is carried out.

On removal or recovery of a patient the premises are disinfected, usually by means of sulphur candles or formaldehyde tablets. The bedding and other articles are removed to the Hospital and there disinfected.

During 1920 51 rooms were disinfected, and the following is a list of bedding removed to Bull Hill Hospital for disinfection:—

Central South-East South-West	speg 13 30 22 65	garage grant	23 19 50	smollid 17 34 18	sqling 6 12 25	7 13 30 50	3 8 5 16	Suits of 1 1 1	0 0 Carpets	0 0 0 0	0 0 Cushions	slwads 0 4 1 5	14 31 62 107	71 159 185 415
Previous years:	Wiley-Will			•										
1919	41	4:	22	54	28	28	6	0	0	0	0	0	48	231
1918	74	2	48	76	46	60	23	1	4	0	0	3	77	414
1917	55	12	38	64	52	58	16	1	0	1	5	2	71	375
1916	76	16	58	83	67	67	21	3	0	1	1	2	55	450
1915	103	33	92	106	70	115	27	1	3	7	6	7	136	706
1914	88	19	73	94	75	125	26	1	3	1	5	12	77	599
1913	45	18	30	49	22	21	9	0	6	8	2	6	15	227

#### NUISANCES.

The number of complaints received during the year was 169, being chiefly choked gullies, accumulation of refuse, etc.

In all cases the premises were visited as early as convenient and the nuisances abated as early as possible.

## CONVERSION OF CLOSETS.

During the year the following conversions of closets were made:—
25 Pails to Water Closets.

- 1 W.W.C. to Water Closet.
- 2 Handflushed Closets to Water Closets.

Fifty-five agreement forms for alterations to drains, converting closets, opening choked W.W.C.'s etc., were signed and the work carried out by the Highways Department.

#### MANURE PITS.

All the manure pits in the district are frequently inspected, and in cases of large accumulations, notices are served to remove manure.

Copies of Bye-laws in force within the Borough are periodically issued to owners of horses, etc.

The following Table gives a list of Inspections, notices served, and result, as required to be furnished to the Medical Officer of Health under Article 20, Sec. 16, of the Sanitary Officer's Order of 1910:—

•	Number	Number of Notices Served.			alt of Se	rvice of No	tices.	
Nature of Inspections.	Inspec-	T 1	D 1:		Remain-	Prosecu	cutions.	
	tions.	Legal.	Preliminary.	abated.	ing in hand.	Instituted.	Pending	
Dwelling Houses	2127	262	324	398	48	• • •		
Houses under Housing, &c., Act	94	• • •	•••	•••				
Factories and Workshops	334	4	• • •	4		1		
Bakehouses	121	2	• • •	2			• • •	
Dairies and Cowsheds	147	23	7	25	3			
Smoke Observations	59	1	• • •		• • •	1		
Infectious Diseases	74	• • •			• • •			
Nuisances-								
Defective Drains	56	9	50	53	3			
Defective Slop Gullies	29	13	20	25	4		• • •	
Defective W.C.'s	15	10	13	14	1			
Defective Easing Troughs, &c	98	24	67	86	12			
Insanitary Yards	7 0	6	12	11	1			
Dirty Premises	$\sim$	20	20	27	2			
Dilapidated Closets		15	14	20	3			
Accumulations of Refuse		21	38	54	6			
Nuisances from Animals		2	8	7 ·	1			
Nuisances from Manure Pits	1	2	2	1	1			
Ashtubs without Covers	tors.	6	6	7				
Broken Slop Pipes		15	27	27	2			
Choked W.W.C.'s		13	12	18	1	1		
Broken Ashtubs		7	8	9				
Dangerous Closet Walls, &c		3	3	3				
Insanitary Pails		12	10	14				
Defective Roofage		3	5	4	1			
Defective Wind ows	12	4.	6	$\frac{1}{6}$	1			
Defective Closet Recep. Doors		13	8	12	9			
Delective Groser Recop. 2 corst.			1		1			

#### FACTORIES AND WORKSHOPS.

Four hundred and fifty-five Inspections were made to Factories and Workshops under the Acts, and were found to be in a fairly sanitary condition. Several notices to abate nuisances were served, and the work in each case carried out.

## The following is a summary of Inspections:-

# F'ACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES, AND HOMEWORKERS' PREMISES.

## I.—INSPECTION.

v	Nur	mber of
	Inspec-	Notices
	tions.	Written.
Factories, including Factory Laundries	174	6
Workshops, including Workshop Laundries	125	3
Workplaces, Homeworkers' Premises	35	2
' NUMBER BURNES TO THE AT	TTT 4 (7/13)	
NUISANCES UNDER PUBLIC HEAL	IH ACI.	
II.—DEFECTS FOUND.		
		r of Defects
•	9	Remedied.
Want of Cleanliness	1	1
Want of Ventilation		• • •
Overcrowding		• • •
Want of Drainage to Floors		
Other Nuisances	3	.3
Sanitary Accommodation—		
Insufficient		
Unsuitable or Defective	2	2
Not Separate for Sexes	1	1
•		
REGISTERED WORKSHOPS		
REGISTERED WORKSHOTS	•	No.
Textile Factories		
Non-Textile Factories		
Factory Workshops		
Workshops		-
Laundries		
Lauranes	• • • • • • • • • • •	
OTHER MATTERS.		
Matters notified to H.M. Inspector of Factories		11
Action taken in matters referred by H.M. In		
diable under the Public Health Acts, but not	t under the	e Factory
and Workshop Act (S.5)		
	• • • • • • • • • • • • • • • • • • • •	4
and Workshop Act (S.5)		

Underground Bakehouses (S.101) in use at end of year .....

#### DAIRIES AND COWSHEDS.

The number of Inspections of Farms made in 1920 was 147, the whole of the Farms being situate in South-East and South-West Wards.

The general cleanliness of the cowshed premises, dairies, and cattle has been very satisfactory. 29 Notices were served to carry out various improvements, and with only 3 exceptions the Notices were complied with.

Copies of the Bye-laws and Regulations made under the Dairies and Cowsheds Order were distributed amongst the cowkeepers, etc.

The following is a summary of nuisances for which notices were served:

Defective Easing Troughs on	٠	Defective Drains	100
Shippons	6	Insanitary Yards	4
Defective Shippon Floors	$\overline{2}$	To Limewash and Cleanse	•
Defective Roofage	3	Insanitary Closet	
Defective Dairy Gullies	4	Provide Manure-pit	]

#### BLACK SMOKE.

During 1920, 59 Oberservations, each of 60 minutes' duration, were taken, the average amount of Black Smoke per observation being  $2\frac{1}{4}$  minutes per hour.

The number taken in 1919 was 56, with an average of 2 minutes.

Notice was served in 1 case, and proceedings were taken against the Sunnybank Laundry, and an order was made to abate the nuisance.

The following is a List of Observations during 1920:—

MILL.	Obser- I	Total Black Smoke Min. Secs.	Boilers.	Apparatus.
Darwen Paper	1	1 15	8	Hodgkinson's.
Sudellside	<b>1</b>	1 30	1	Procter's.
Progress	1	1 45	1	Whittaker's.
Vale Brook	1	$2 \qquad 0$	. 1	Procter's.
Springfield	1	$2 \qquad 0$	1	Hand.
New Bridge	1	$\stackrel{\circ}{2}$ 0	1	Whittaker's.
Holme	1	$2 \qquad 0$	1	Procter's.

N.T.	No of.	To			*
MILL.	Obser-vations.		Smoke Secs.		Apparatus.
Cotton Hall	1	2	0	1	Benniss's.
Ellenshaw	1	2	15	1	Hand.
Perseverance	1	2	45	1	Procter's.
Darwen Spinning	1	3	15	3	Hand.
Rose	2	3	0	1	Procter's.
Whitehall	2	3	15	1	Benniss's.
Marsh House	2	3	15	1	Hand.
Waterfield	2	$\sqrt{3}$	45	1	Grimshaw's.
Tackfield	2	4	30	1	Hand.
Hanover Street	2	4-	30	2	1 Hand, 1 Benniss's
Greenfield New	2	4	45	1	Procter's.
India	2	5	0	3	Hand.
Premier	2	5	15	1	
Hope	2	õ	15	$\dot{2}$	, ,
Hampden	2	5	30	1	Procter's.
Primrose	2	5	30	1	,,,
Greenfield Old	2	5	30	1	,,
Bowling Green	$\frac{2}{\cdot}$	5	45	3	,,
South End	2	5 "	45	1	,,
Albert	2	6	0	2	Hand.
Britannia	2	6	15 =	2	,,
Highfield	2	6	30	1	,,
New	2	7	0	2	1 Hand, 1 Benniss's.
South Street	2	7	30	2	,,
Starkie Street	3	7	30	1	Hand.
Sunnybank Laundry	5	13	45	1	, ,

## SALE OF FOOD AND DRUCS ACT, 1875 TO 1907.

As Inspector under the above Act, I purchased 4 samples of milk and submitted them for analysis. They were all found to be genuine.

One sample of water was obtained from a well supplying houses at Bull Hill and submitted for analysis. The water was found to be fit for drinking purposes, but the well was liable to pollution.

Seven houses have since been supplied with Town's Water.

Four houses are still using the well water.

#### HOUSING AND TOWN PLANNING ACTS.

SUMMARY UNDER ARTICLE V. OF THE HOUSING (INSPECTION OF DISTRICT) REGULATIONS, 1910.

1.	Number of Dwellings inspected under Sec. 17	94
2. ·	Number of Dwelling-houses which, on inspection, were considered to be in a state so dangerous and injurious to health as to be unfit for human habitation	
3.	Number of representations made to the Local Authority with a view to the making of Closing Orders, Section 17 (2)	
4.	Number of Closing Orders made, Section 17 (2)	
ŏ.	Number of Dwelling-houses, the defects of which were remedied without making the Closing Orders	4
6.	Number of Dwelling-houses which, after making the Closing Orders, were put in a fit state for human habitation	
7.	Number of Dwelling-houses in respect of which Demolition Orders were made	10

#### INSPECTION OF FOOD.

Periodical inspections are made of premises where food is prepared for human consumption.

The fish and fruit markets are continually under observation.

16 stone of mackerel and 160 lbs. of pears were condemned as unfit for food.

Supplementary reports on various matters requiring attention have been submitted to the Health Committee each month during the year, along with recommendations for the serving of statutory notices, etc., under the various Public Health Acts.

I am, Gentlemen,

Your obedient servant,

#### WM. E. MARSDEN,

M. Inst. San. Eng.

Cert. Royal San. Inst.

#### PUBLIC HEALTH OFFICE,

February, 1921.

## Northern District.

### TO THE CHAIRMAN AND MEMBERS OF THE HEALTH COMMITTEE.

GENTLEMEN,

The following is a brief summary of the work carried out by me in the above district during the year ending December 31st, 1920. The district is comprised of North-East, North-West, and West-Central Wards.

During the year two houses were demolished in North-West Ward. No houses were erected during the year.

The following table shows the number of houses, etc.:—

	Houses, 1920.	Persons, Census, 1911.	Families, or Separate Occupiers, 1911.	Estimated Population, 1920.
West Central Ward	940	3947	912	3847
North-East Ward	2324	9181	2165	8793
North-West Ward	1944	7055	1758	7365
	5208	20183	4835	20005

The average number of persons per house according to census returns, 1911, was about 4.17 persons. The average per house in 1920 averages 3.84 persons per house.

#### HOUSING CONDITIONS.

#### I.—UNFIT DWELLING HOUSES (INSPECTION).

1.	Total number of dwelling-houses inspected for housing defects	2582
	(under Public Health or Housing Acts)	2982
2.	Number inspected and recorded under Regulations, 1910	52
3.	Number of houses found to be unfit for habitation	52
4.	Number of dwelling-houses (exclusive of above-mentioned) found not to be in all respects reasonably fit for habitation.	3

II.—DEFECTS REMEDIED WITHOUT SERVICE OF FORMAL NOTICE.
Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority, or their Officers 261
PROCEEDINGS UNDER PUBLIC HEALTH ACTS.
1. Number of dwelling-houses in respect of which notices were served requiring defects to be remedied
2. Number of dwelling-houses in which defects were remedied—  (a) by owners
(a) by owners
PROCEEDINGS UNDER SECTIONS 17 AND 18 OF THE HOUSING AND TOWN PLANNING ACT, 1909.
1. Number of representations made with a view to making closing orders
2. Number of dwelling-houses in respect of which closing orders were made
3. Number of dwelling-houses in respect of which closing orders were determined, the houses having been made fit
4. Number of demolition orders
5. Number of houses demolished
UNHEALTHY AREAS. (Improvement Scheme, Part 1 and 2, 1890 Act).
1. Name of Areas Part 1 Scheme.
2. Acreage
3. Number of working class houses in area, Part 1
4. Number of working class persons to be displaced, Part 1 124 Persons.

#### DIRTY HOUSES.

In the monthly reports submitted to the Committee, details were given of certain houses situated in William Street, Back Duckworth Street, John Street, Hutchinson Court, Bury Street, Bury Square, Dove Street, Richard Street, and Robert Street, which were found to be in a very filthy condition. Preliminary, and ultimately, statutory notices were served upon the occupiers, and the rooms, etc., were cleansed at once.

#### INFECTIOUS DISEASES NOTIFIED.

WARD	Scarlet Fever		Scarlet Fever		Scarlet Fever			Fneumonia	D:	Dipuneria		er ysipeias	Ophthalmia	Neonatorum		Malaria	, ac	sumption	Trench	Fever	F	Typnoia	Measles and	German Measles	Puerperal	Fever	Cerebro	Meningitis	Tot	5a
	1919	1920	1919	1920	919	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920	1919	1920				
West-Central		2	0	1	1	0	0	2	0	0	1	2	1	4	1	0	0	1	3	21	1	0	0	0	8,	33				
North-East	1	12	3	2	2	3	2	1	0	2	10	0	7	6	0	0	O	0	9	<b>32</b>	0	1	0	0	34	59				
North-West	4	3	6	1	1	3	0	0	0	0	6	0	7	6	0	0	0	0	23	30	0	0	0	0	47	43				
Total	5	17	9	4	4	6	2	3	0	2	17	2	15	16	1	0	0	1	35	83	1	1	0	0	89	135				

Immediately upon receipt of notification of the existence of cases of Infectious Disease I visited the houses and ascertained if the patients were properly isolated. I also made a thorough examination of the premises. Any defects discovered in the drainage or sanitary arrangements I caused to be remedied as quickly as possible. Seven of the patients suffering from Scarlet Fever were removed to the Bull Hill Hospital. At the termination of each case of infectious disease, the rooms were thoroughly cleansed and disinfected, and the bedding, etc., removed to Bull Hill Hospital and disinfected in the Super-heated Steam Disinfector.

During the year 36 loads of bedding, etc., were disinfected.

#### CENERAL INSPECTION OF DISTRICT.

In accordance with your instructions and the General Order of the Local Government Board I have endeavoured, by systematic inspection, to keep myself informed in respect of any nuisance existing in the district, as the following summary will show:—

#### SUMMARY OF WORK DONE IN THE DISTRICT.

Total number of Nuisances discovered in District	47]
Letters written respecting Nuisances	72
Preliminary Notices served respecting Nuisances	412
Legal Notices served respecting Nuisances	127
	1830
,, Nuisances abated (including outstanding Nuisances, 1919)	388
,, Houses and Premises Inspected	2522
,, Inspections of Refuse Tips	74
,, Inspections of Schools and Public Buildings	60
Complaints Received and Investigated	193

Number of	Drains, Water	Closets, &c., Tested	38
, ,	Smoke Observ	ations Taken	57
, ,	Inspections of	Factories and Workshops	200
,,		Lodging-Houses	56
, ,	,,	Bake-Houses	123

For further particulars see Table in Medical Officer's Report.

#### BLACK SMOKE NUISANCE.

The nuisance arising from the emission of Black Smoke from Factory Chimneys has again received my attention. Fifty-seven observations were taken, each of one hour's duration. Several of the mills worked intermittently during the year.

In two instances the time limit was exceeded and statutory notices were served upon the occupiers of the respective mills.

The following Table of Analysis of Observations shows the average amount of black smoke emitted in minutes per hour during the last 12 years: 1920 1919 1918 1917 1916 1915 1914 1913 1912 1911 1910 1909 2.70 2.24 2.36 2.60 2.11 1.91 2.223.40 3.0 2.08  $2.12 \quad 2.43$ 

Advantage has been taken of the opportunity afforded by the mills being closed owing to depression in trade to carry out repairs of boilers, economisers, stokers, etc. At 15 of the mills the boilers are hand fired.

At 30 of the mills mechanical stokers of various kinds are in use, and there are 68 boilers at the respective mills, etc.

#### FACTORIES AND WORKSHOPS.

#### I.—INSPECTION.

	Number	r of
Premises.	Inspections.	Written
	tions.	Notices.
Factories	96	9
Workshops	190	9
Workplaces	14	0
Total	200	18

## NUISANCES UNDER PUBLIC HEALTH ACTS.

· II.—DEFECTS FO		
		f Defects.
		Remedied.
Want of Cleanliness	2	2
,, · Ventilation	1	.,1,
,, Drainage of Floors	1	(i. 1 (i.)
Other Nuisances	11.	11.
Sanitary Conveniences—		
Unsuitable and Defective	3	3
Not Separate for Sexes	0	0
Breach of Special Sanitary Requirements (S.		
to 100)		6
	TEDC	
III.—OTHER MAT	IERS.	
Matters notified to H.M. Inspector of Fa	actories :—	
Action taken in matters referred by H.M. Ins Public Health Acts (notified by H.M. Ins	(A)	
Reports of action taken sent to Inspector .		5
Certified underground Bakehouses in use at e	end of year	2
IV.—REGISTERED FACTORIES AN	D WORKSHOPS, I	ETC.
		Number.
Textile Factories		. 32
Non-Textile Factories		. 36
Factory Workshops		. 42
Workshops		187
Workplaces		

Four lists of outworkers making wearing apparel were supplied to me during the year in compliance with regulations.

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## LIST OF FACTORIES, FACTORY WORKSHOPS, WORKSHOPS, ETC.

Textile Cotton Factories	32	Picture Framing	• 6
Joiners and Builders	10	Boots and Shoes	
Paper and Paint Mills	6	Chipped Potatoes	23
Engineers and Foundries	8	Ice Cream	1
Printers	5	Dressmakers, etc	33
Gas and Electricity Works	2	Hay and Straw Dealers	2
Waste Sorting Works	4	Motor Repairing	5
Rope Works	1	Livery Stables	1
Aerated Water Works	2	Tailors	10
Box Making	2	Baking Powder Maker	1
Reed Works	1	Tin Plate Works	3
Slay Makers	1	Scales and Weights	2
Wheelwrights	5	Saddlers	3
Firewood Making	1	Plumbers	6
Pork Butchers	4	Blacksmiths	3
Destructor Works	1	Tripe Dressing	2
Wringing Machine Works	1	Cabinet Makers	2
Bakers and Confectioners	65	Marine Stores	3
Wholesale Grocers	3	Stocking Knitting	1
Brush Maker	1	Electrical Engineers	2
Tea Mixing	1	Watch Repairing	4
Painters' Preparation Workshops	6	Flock Bed Dressing	1
Polishing Paste	1	Pickle Making	1
Paper Bags	1	Chocolate Making	1
Herb Beer Making			

### DAIRIES, COWSHEDS, AND MILKSHOPS.

There are 36 farms, with 67 shippons, in the Northern District. No dairy cows have been kept during the year at Sniddle Hill, Holly Bank, Hawkshaw, and Lower Trees Farms. A few of the farms are used chiefly for rearing young stock. About 500 cows are stalled in the shippons, in addition to young stock and oxen. Improvements were carried out under the Dairies, Cowsheds, and Milkshops Regulations, as follows:—

Shippon and Yard Pavement Relaid or Repaired	2
Lighting and Ventilation of Shippons Improved	1
Drains Reconstructed or Repaired	1

New Easing Troughs and Downspouts Fixed	3
Dirty Shippons Limewashed	13
Repairs to Roofage of Shippons	2
Repairs to Dairy	1

Many repairs of a minor nature were also carried out.

I have continued to watch carefully the water supplies at the various farms.

Copies of the Dairies, Cowsheds, and Milkshops Regulations have again been supplied to each farmer.

During the year one grocer was found selling milk in his shop and, upon examination, the premises were found to be unsuitable. The Committee refused to register him, and the sale of milk upon the premises was prohibited.

#### INSPECTION OF SCHOOLS.

Many Inspections of the 13 Elementary Schools were made, particularly during the vacations, viz., Easter, Mid-Summer, and Christmas, to survey the buildings and ascertain if the cleaning had been done in accordance with your requirements, as issued prior to each vacation by Mr. W. Bretherick, Secretary of Education. I found the work done in accordance with instructions. Defects in the buildings, drainage, and pavement of yards were remedied.

#### TRIPERIES.

The waste material from the works is removed daily and cremated at the Destructor, and great care is exercised to avoid effluvia nuisances. I visit the works daily

There is one gut scraper in the town, and his workshop, which is well kept, is situated at the Public Slaughter-Houses.

#### SALE OF FOOD AND DRUCS ACTS.

During the year I purchased samples of milk and submitted them to the County Analyst, with the following results:—

Dat 192			Food.		Sample Numbe		Result of Analysis.
Jan.	12		Milk	• • •	24		Genuine.
, ,	12		, ,		25	• • •	,,
, ,	12		, ,		26		,,
, ,	27		,,		27		,,
,,	27		, ,	• • •	28	•••	Very slightly deficient in cream. Fat 2.92 per cent. Contained cowdung 2 parts per 100,000 by volume.
,,	27	• • •	,,		29		Genuine.
,,	27	Skimm	ed Milk		30		Genuine Skimmed Milk.
, ,	27		Milk		31		Genuine.
, ,	27		, ,	•••	32	• • •	Genuine, contained cowdung 3 parts per 100,000 by volume.
Feb.	20	• • •	9 2	• • •	33		Genuine, contained cowdung 2.5 parts by volume per 100,000.
,,	20	Skimm	ned Milk		34		Genuine Unskimmed Milk.
, ,	20		Milk		35		Genuine.
,,	20		9 <b>9</b>		36		, , ,
Jne.	10		, ,		37		,,
,,	10	• • •	, ,		38		,,
, ,	10		, ,		39		,,
, ,	11		,,		40	,	, ,
, ,	11		,,	• • •	41		Sample broken in transit.
, ,	11	• • •	,,		42	• • •	Sample broken in transit.

## OTHER FOODS CONDEMNED AND DESTROYED.

4 stones of fish (Fillets of Ling).

- 18 Tins of condensed milk.
- 10 Bags of Tripe.
- 15 lbs. of Butter.

I have continued to keep a sharp outlook over the various articles of food offered for sale for human consumption in the district. The butchers' shops are regularly visited.

#### MODEL LODGING HOUSE.

During the year there has been an improvement in the number of lodgers, and if there had not been a depression in trade the numbers would have compared favourably with those of 1913. This is the only common lodging-house in the town, a distinct advantage from a public health standpoint. I frequently visited the house, often in the evening, after the lodgers had retired to rest, when the number of cubicles occupied were checked and the books examined.

The following Table shows the average number of occupants for each month during the last 12 years:—

```
1909. 1910. 1911. 1912. 1913.
                                           1914. 1915. 1916. 1917. 1918. 1919.
                                                                                  1920.
                                           121.0
                                                  84.6 65.3 59.1
                                                                                  70.20
 Jan. ..... 76.0 70.2 75.2
                              72.1
                                    111.3
                                                                   53.04 5912
                 76.2
• Feb. ..... 74.9
                                                                                  81.30
                        64.1
                               77.1
                                    125.2
                                           126.6
                                                   86.9 69.1 61.2
                                                                   54 82 57.90
 March . . 73.2
                                                   85.5 67.2 66.3
                  70.2
                        80.4
                               95 3
                                                                                  79.30
                                    127.2
                                            125.6
                                                                    53.58 59.90
 April ..... 79.5
                                            129.4 109.2 67.2 68 2
                                                                                  91 66
                  79.2
                        86.5 102.6
                                    127.4
                                                                    57.77 64.27
                                                                                  93.30
 May ..... 83.2
                  79.2
                        78.0
                              96.0
                                    126.2
                                            127.2
                                                   88.2 53.1 66.9
                                                                    54.35 68.70
 June ..... 79.2
                                    131.8
                                                                    55.37 72.00 101.83
                        71.5
                               86.1
                                            122.3
                                                   84.1 50.7 62.2
                  78.1
 July ..... 84.1
                                    130.1
                  78.7
                        69.2
                               77.1
                                                   75.7 53.1 60.0
                                                                   51.26 67.24 100.12
                                            124.1
 August ... 81.9
                  72.1
                        70.2
                               91.5
                                     132.9
                                                    73 2 62.1 57.2
                                                                   48.00 69.23 106.00
                                            108.1
                        79.2 104.2
                                     123.1
                                             91.1
                                                   66.1 60.2 56.7
                                                                    53.93 71.24
                                                                                  95.16
 Sept. ..... 87.0
                  70.2
 October ... 74.2
                  72.6
                        82.1 113.5
                                    128.1
                                             94.2
                                                    58.1 60.6 57.7
                                                                    54.90 74.17
                                                                                  89.00
                        79.1 109.1
 Nov. ..... 74.1
                  79.6
                                     124.2
                                                    61.2 60.0 54.7
                                             87.2
                                                                    56.47 71.70
                                                                                  84.63
 Dec. ..... 80.1 78.2
                        75.2 108 9
                                     122.4
                                             79.2
                                                    64.9 61.1 51 7
                                                                    59.19 68.15
                                                                                  88.74
                                                    78.1 60,8 60.0
 Average... 78.9 75.3 77.5 94.4
                                    125.8
                                            111.3
                                                                    54.39 66.97
                                                                                  90.02
```

#### MANURE PITS.

I made an inspection during the months of June, July and August, of the 38 Midden Steads in use in the Northern District, and caused the pits to be emptied weekly. Everything possible was done to mitigate the nuisance caused by flies.

#### OTHER MATTERS.

At each monthly meeting of the Health Committee, in addition to the printed report, I have submitted a detailed type-written statement of the work carried on in my district.

I am pleased to say that the service of Preliminary and Legal Notices had the effect of securing the abatement of nuisances, and it was not necessary to institute legal proceedings in any case.

Agreement Forms have been signed by owners of property for the Corporation workmen to carry out repairs, etc., to back yards, drains, etc.

This work has been done under my supervision.

I am, Gentlemen,

Yours obediently,

C. R. WALSH, M. R. San. Inst., &c.,

Sanitary Inspector, &c.



#### ADDENDA.

The amount of Out-door Relief granted to persons resident within the Borough during the year ended 31st December, 1920, was £1,248 10s. 4d.

#### SLAUGHTER-HOUSE REPORT, 1920.

## To the Chairman and Members of the Slaughter-House Committee.

GENTLEMEN,

During the year the various animals passing through the Public and Private Abattoirs have been carefully examined both before and after slaughter. In addition, large consignments of fresh meat have been imported from Blackburn and Birkenhead. Quantities of frozen and chilled beef, mutton, pork have been received from Liverpool; necessitating inspection in the retailers' shops.

The meat sold by retail during the first four months of the year was not equal to pre-war standard, the registered wholesale butchers had then to accept animals, carcases, etc., which were allocated to them by the Meat Control Authorities. From May to December (when control was removed) there was a decided improvement in the quality of the meat sold.

Several animals and carcases were examined at the farms, and many animals accidently injured were conveyed to the Abattoirs and slaughtered under my supervision, in some cases during the evening.

## NUMBER OF ANIMALS SLAUGHTERED AT THE PUBLIC AND PRIVATE ABATTOIRS.

	$_{ m BEA}$	STS		PAND MBS	PIGS	CAL	VEC	ГОТ	7.4.5
		Private		Private	Public		Private	Public	
January	118	79	121	79	105	47		391	1.58
February	120	72	176	113	58	73	-	427	185
March	132	61	147	70	37	84		<b>4</b> 00	131
April	66	41	126	76	59	107		358	117
May		64	105	77	54	74		314	141
June	1.0	27	74	35	27	36	-	182	62
July	103	54	789	293	9	17		918	347
August	118	57	950	299	21	2	Notes, areadorner	1091	356
September	59	75	418	508	22	5	4	504	587
October	112	50	790	333	54	9	6	965	389
November	140	57	713	270	46	11	1	910	328
December	140	69	797	313	203	4	4	1144	386
Total 1920	1234	706	5206	2466	695	469	15	7604	3187
Total 1919	1226	748	4074	2681	701	131	131	6132	3560

The above Table shows an increase in the Public Abattoir of 8 beasts, 1132 sheep and lambs, 338 calves, and a diminution of 6 pigs as compared with last year, and a diminution of 42 beasts, 215 sheep and lambs, and 116 calves in the Private Abattoir.

During the year 118 carcases required special examination; 25 were affected with Tuberculosis in varying degrees. All affected parts were condemned and destroyed.

Twenty-five immature calves, 1 cow, 3 sheep, and 2 pigs were condemned and destroyed for other causes than Tuberculosis.

The total amount condemned and destroyed during the year was 6551lbs. for the following causes:—

	•	
Number	Wei	ght in lbs.
Examined.	Cause. co	ndemned.
25	. Tuberculosis	2148
38	. Liver Fluke	105
8	. Cirrhosis	88
25	. Immaturity	1439
7	. Injured	1418
, 5	. Asphyxiation	590
3	Unsound	500
1	. Pneumonia	22
3	. Abscess	50
1	. Mastitis	9
1	. Enteritis	50
1	. Hydatids	12
	Other causes	120
		65511bs.

#### ILLICIT SLAUCHTERING.

It was found necessary on December 30th to prosecute a farmer for killing a pig in an unregistered slaughter-house. The Magistrates imposed a fine of 10s. This action will have an inhibitory influence, and prevent illicit killing of animals intended for human food.

I am, Gentlemen,

Yours respectfully,

C. R. WALSH, M. R. San. Inst.,

Certified Inspector of Meat and Other Foods.

## SUPERINTENDENT'S OFFICE,

CLEANSING DEPARTMENT.

### To The Chairman and Members of the Health Committee.

### GENTLEMEN,

I beg to submit to you my Annual Report for the year January 1st to December 31st, 1920.

The following is a Summary of Work done from January 1st to December 31st, 1920:—

House Refuse to Destructor  Market Garbage to Destructor	Tons. 14195 288	C	wts. 6 15	Qrs. 0 0 0	
Clinkers removed by motor from Destructor	Tons. (		Qrs.	952 I	oads.
Clinkers removed by motor from Destructor				2153	,,
Sweepings to various tips				2207	,,
Sweepings deposited by hand-carts at Destr	2627	,,			
Gully Wreck to various tips				976	,,
Street Gullies emptied				20046	,,
Length of Streets swept by hand	$2744\frac{1}{4}$	Miles			
Excreta to Sewage Works	2019 I	Loads.			
Excreta Pails emptied				88732	
Ashes Tubs emptied				310162	
Ashpits emptied				847	
Water deposited on streets	361 I	Loads.			
Snow removed from streets				29	, ,
Ashes Tubs added during the year				7	
Pails brought in from closet conversions				30	

Yours obediently,

## JOSEPH NICCOLL,

Cleansing Superintendent.

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